DOCUMENT RESUME

ED 056 820 24 RC 005 776

AUTHOR	Heathman, James E.; Nafzinger, Alyce J.
TITLE	Scheduling for Flexibility; A Manual for Administrators of Small Schools.
INSTITUTION	New Mexico State Univ., University Park. ERIC Clearinghouse on Rural Education and Small Schools.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/CE), Washington, D.C.
BUREAU NO	BR-6-2469
PUB DATE	Oct 71
CONTRACT	OEC-1-6-062469-1574
NOTE	62p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (GPO Stock No. 1780-0867, $0.65)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Computer Programs; *Course Organization; Flexible Schedules; *Flexible Scheduling; *Manuals; Scheduling; *Small Schools; Teaching Methods; *Time Blocks

ABSTRACT

The manual was prepared to provide administrators of small schools with information on techniques which promote flexibility in school scheduling. While no attempt was made to provide details for implementation of flexible scheduling, the information provided should be sufficient to enable the administrator (1) to determine if some variation of flexible scheduling would be beneficial and feasible for his particular school situation and (2) to locate more specific information by contacting schools or by obtaining literature referred to in the manual. The 31-item bibliography at the end of this publication is composed of citations and abstracts from "Research in Education." These citations were selected specifically for their relevance to rural and small schools. (Author)

ED056820

SCHEDULING FOR FLEXIBILITY

A Manual for Administrators of Small Schools

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

by

James E. Heathman

and

Alyce J. Nafziger

October 1971

EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

CLEARINGHOUSE ON RURAL EDUCATION AND SMALL SCHOOLS (CRESS)

New Mexico State University

Las Cruces, New Mexico 88001

This publication was prepared pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402—Price 65 cents
Stock No. 1780-0867

RC005776

TABLE OF CONTENTS

Introduction iii

Flexible Scheduling--An Overview 1

Types of Flexible Schedules. 11

Simple Block. 12

Back-to-Back. 14

Interdisciplinary 16

School-Wide Block 17

School-Wide Block (Variation) 18

Open-Lab. 19

Rotating. 20

Block-Modular 21

Flexible Modular. 22

Selected Bibliography of ERIC Documents. 25

Subject Index 57

Order Blank 61

INTRODUCTION

This manual was prepared to provide administrators of small schools with information on techniques which promote flexibility in school scheduling. While no attempt was made to provide details for implementation of flexible scheduling, it is hoped that the information provided will be sufficient to enable the administrator (1) to determine if some variation of flexible scheduling would be beneficial and feasible for his particular school situation, and (2) to locate more specific information by contacting schools or by obtaining literature referred to in the following pages.

The bibliography at the end of this publication is composed of citations and abstracts from Research in Education, a monthly publication of the Office of Education. These citations were selected specifically for their relevance to rural and small schools.

J.E.H.

FLEXIBLE SCHEDULING--AN OVERVIEW

WHAT IS FLEXIBLE SCHEDULING?

Flexible scheduling is an operating framework characterized by classes of unequal length which meet at differing periods throughout the week and which are geared to the individual needs of students. Flexible scheduling may vary from merely rearranging time allotments and sequences of established courses to a complex modular approach in which schedules for each student are generated daily and picked up by the student each morning.

WHO DEVELOPED THE CONSTRUCT?

Dr. J. Lloyd Trump, in his booklet Images of the Future (1), outlined concepts of flexible scheduling as a way to improve the quality of education in secondary schools by reducing rigidity in school operation.

WHAT IS THE PHILOSOPHY BEHIND FLEXIBLE SCHEDULING?

Each student has unique abilities, aspirations, and experiences to bring to the learning situation. Additionally, each course in the curriculum is different in terms of conceptual depth and educational benefit. Since learning is an individual matter for each pupil, it takes place at an individual rate. Individual students learn widely different things from exposure to the same course content. To optimize learning, pupils should be able to proceed at "a self-determined pace on self-selected subjects to achieve self-evaluated and self-satisfying goals." (2)

HOW CAN FLEXIBLE SCHEDULING BENEFIT THE SMALL SCHOOL?

Small schools are hard-pressed to offer an extensive curriculum with a limited staff. Flexible scheduling permits the student to pursue nonstandard units of study on an individual basis using the teacher as a resource person. Variable time blocks and variable group size for different instructional activities permit better use of teaching talent and teacher specialization and more effective use of outside resource persons.

WHAT ARE RELATED CONCEPTS AND INSTRUCTIONAL MODES?

Flexible scheduling implies a more individualized approach to instruction. It makes provision for large group instruction, small group instruction, and independent study. Variable group size allows more effective use of such technological developments as computer-assisted instruction, instructional television, and the amplified telephone. The concepts of nongraded schools and team teaching are concomitant with flexible scheduling. In fact, the nongraded concept, or continuous progress for each student, requires flexibility in scheduling.

HOW DOES FLEXIBLE SCHEDULING AFFECT THE STUDENT?

The variable schedule provides the student with the opportunity to develop responsibility for the use of his own time and for the depth of his own education. The fast learner is able to move faster or delve deeper into subject matter while the slow learner can get the necessary help to develop his full potential.

WHAT CHANGES IN TEACHER ROLES RESULT FROM FLEXIBLE SCHEDULING?

Teachers are given more opportunities to participate in curriculum development since a greater degree of professional communication and cooperative planning is required than usually exists in the isolated classroom teaching situation. Teachers make decisions about the length and frequency of learning activities. The flexible schedule allows the teacher greater opportunity to work with individual students in enrichment and remedial activities. Perhaps most attractive is the elimination of the "routineness of teaching." Finally, for maximum effectiveness, teaching assignments within a flexible schedule should be consistent with the training, talents, and interests of teachers.

HOW DOES THE ADMINISTRATOR PROMOTE FLEXIBILITY IN SCHEDULING?

Acceptance of flexible scheduling by teachers seems to have a direct relationship to the amount of support shown by administrators. Swenson and Keys (3) report the following procedure was used at Brookhurst Junior High School in Anaheim, California, to prepare for flexible scheduling:

(1) Set up staff meetings with representatives of the various instructional areas to discuss the feasibility of making the length and frequency of class periods flexible.

(2) Sent parents a letter explaining the general goals of the program and requesting their support.

(3) Invited parents to a series of meetings at which the specifics and mechanics of the new program were explained.

(4) Submitted a tentative plan to the board of education for approval.

(5) Selected the staff to work within the flexible schedule. (The pilot program at Brookhurst involved only the ninth grade students and teachers).

(6) Conducted a three-week workshop for all members of the staff.

WHAT IMPLICATIONS DOES FLEXIBLE SCHEDULING HAVE FOR SCHOOL FACILITIES?

If flexible scheduling changes the mode of instruction, some minor remodeling of facilities will be needed. If independent study time increases, specialized study areas must be developed. Large group instruction requires large rooms with good acoustics. Partitions or bookcases can separate a traditional classroom into two small group instructional areas. According to Manlove and Beggs (4), existing facilities should not stand in the way of instructional improvement, for "traditional classrooms become learning laboratories, the library becomes an instructional materials center, and the shop spaces are used as a place for independent study."

WHAT INFORMATION IS NEEDED TO DEVELOP A FLEXIBLE SCHEDULE?

Essentially the same information needed to develop a traditional schedule:

(1) A list of courses to be offered

(2) Types of instruction each course will include

(3) Number of students requesting each course

(4) Time requirements for each type of instruction for each course

(5) Sequential arrangement of class meetings per week for each instructional mode

(6) Staff requirements for each type of instruction for each course

(7) Facilities requirements for each type of instruction for each course

Flexibility derives from how the individual student is handled within the schedule. Are course offerings open to students in a wide variety of combinations? May students deviate from listed course offerings using independent study blocks of time? Is the capable student permitted to complete a course before the slower student? If the answers to these three questions are all "yes," a large degree of flexibility has been attained.

WHAT PROBLEMS CAN BE ANTICIPATED WHEN SMALL SCHOOLS ATTEMPT FLEXIBILITY IN SCHEDULING?

Since small schools do not have the enrollment to support several sections of most courses, the probability of schedule conflicts for students is increased. To compensate for small enrollments Austin and Gividen (5) suggest that scheduling problems could be minimized "by long-range planning which provides some 'low-demand' offerings in alternate years, by occasional use of correspondence courses, and by the use of multiple-classes in which one teacher guides the learning activities of two or more classes in one room and in one class period." In addition, the more complex flexible scheduling models usually require computer services; such services may not always be readily accessible to small schools.

Other problems have little relation to school size. More time is required to develop a flexible schedule than to develop a traditional schedule. Teachers work harder, not only due to increased involvement in the scheduling process, but in the instructional process as well. Some students are not mature enough to be responsible for the use of unscheduled time, and existing reference materials are frequently inadequate for an increased emphasis on independent study in the instructional program. Attendance accounting is complicated by the flexible schedule since student movement is less structured.

ARE COMPUTER PROGRAMS FOR SCHEDULING AVAILABLE?

The computerized Stanford School Scheduling System (S^4) facilitates the construction of complex flexible schedules. From 1963 to 1968, over 300 schedules were computed for more than 100 different schools using S^4 programs (6). A complete set of the commented programs recorded on magnetic tape, together with a School Manual and a Data Processor's Manual can be obtained at a cost of $500 from:

Robert V. Oakford
Department of Industrial Engineering
Stanford University
Stanford, California 94305
Telephone: (415) 321-2300 Ext. 4474

The Generalized Academic Simulation Program (GASP) was developed at the Massachusetts Institute of Technology. Any school desiring the GASP scheduling service should be able to buy it as a package from the company or institution from which it buys computer time. The programs are distributed by IBM and should be available at any computer installation using IBM hardware. Schools that have used the GASP computer programs are (7):

Wayland High School, Wayland, Massachusetts
Cohasset High School, Cohasset, Massachusetts
Pascack Hills High School, Montvale, New Jersey
Ridgewood High School, Norridge, Illinois

WHERE HAS FLEXIBLE SCHEDULING BEEN IMPLEMENTED?

The schools mentioned below are known to have employed some form of flexible scheduling. However, it is not known if the schedules for which they are cited in publications on flexible scheduling are currently in use. The schools are presented as sources to contact to allow the administrator considering flexible scheduling to gain valuable insights based on experience.

Thirty-three schools using some form of flexible scheduling were surveyed as part of the preparation of IndiFlexS, an application of flexible scheduling developed at Indiana University and described by Manlove and Beggs (8). The schools are:

Arvada West High School, Jefferson County, Colorado
Barrington High School, Barrington, Illinois
Brigham Young University School, Provo, Utah
Brookhurst Junior High School, Anaheim, California
Campus High School, Wichita, Kansas
El Dorado High School, El Dorado, Arkansas
Evanston Township High School, Evanston, Illinois
Fontana High School, Fontana, California
Fremont High School, Sunnyvale, California
Glenbrook South High School, Glenview, Illinois
Holland High School, Holland, Michigan
James Madison High School, San Diego, California
James Monroe High School, Bronx, New York
Julius West Junior High School, Rockville, Maryland
Lakeview High School, Decatur, Illinois
*Lincoln High School, Stockton, California
*Marshall High School, Portland, Oregon

---

*These Schools have used the Stanford School Scheduling System (S^4)

Mary Potter High School, Oxford, North Carolina
Meadowbrook Junior High School, Newton, Massachusetts
Newton High School, Newton, Massachusetts
New York City Schools, New York, New York
Nova High School, Ft. Lauderdale, Florida
Palo Alto High School, Palo Alto, California
Pelham High School, Pelham, New York
Penn High School, Mishawaka, Indiana
Poway High School, Poway, California
Ridgewood High School, Norridge, Illinois
Senn High School, Chicago, Illinois
Shawnee Junior High School, Lima, Ohio
South Hills High School, Covina Valley, California
University School, The University of Chicago, Chicago Illinois
*Virgin Valley High School, Mesquite, Nevada
William C. Overfelt High School, San Jose, California

In 1969, non-traditional schedules were being used in 65 senior high schools and 21 junior high schools in California. (9) Names and addresses of some of the smaller schools are listed below by the type of flexible schedule used:

MODULAR SCHEDULE

Anderson Valley High School
P. O. Box 457
Boonville 95415

Borrego Springs High School
P. O. Box 1235
Borrego Springs 92004

Carpinteria High School
4810 Foothill Road
Carpinteria 93013

Carpinteria Junior High School
5351 Carpinteria Avenue
Carpinteria 93013

Ceres High School
P. O. Box 307
Ceres 95307

Coalinga Junior High School
657 Sunset Street
Coalinga 93210

Cuyama Valley High School
New Cuyama 93254

Elsinore High School
21 - 800 Canyon Drive
Elsinore 92330

Lower Lake High School
P. O. Box 188
Lower Lake 95457

Nordhoff High School
1401 Maricopa Highway
Ojai 93023

Owens Valley High School
202 Clay Street, Box 68
Independence 93526

Pescadero High School
P. O. Box 188
Pescadero 94010

---

*This School has used the Stanford School Scheduling System (S^4)

MODULAR SCHEDULE (Cont.)

Poway High School
13626 Twin Peaks Road
Poway 92064

Woodlake High School
400 W. Whitney Avenue
Woodlake 93286

ROTATING SCHEDULE

Biggs High School
P. O. Box 397
Biggs 95917

Exeter High School
820 San Juan Avenue
Exeter 93221

Gridley High School
300 E. Spruce
Gridley 95948

Ione High School
Mill Street
Ione 95640

Kingsburg High School
1900 18th Avenue
Kingsburg 93631

Ramona High School
1401 Hanson Avenue
Ramona 92065

ALTERNATE DAY SCHEDULE

Colusa High School
901 Colusa Avenue
Colusa 95932

Live Oak High School
Pennington Road
Live Oak 95953

Pierce High School
Arbuckle 95912

BLOCK SCHEDULE

Arvin High School
P. O. Box 518
Arvin 93293

Monte Vista High School
3131 Stone Valley Road
Danville 94526

Santa Ynez High School
P. O. Box 185
Santa Ynez 93460

Tehachapi High School
711 E. Anita Drive
Tehachapi 93561

OTHER VARIATIONS

Apple Valley High School
11837 Navajo
Apple Valley 92307

Middletown Junior-Senior High School
P. O. Box 338
Middletown 94561

Williams High School
Williams 95987

In the fall 1970 issue of the ERIC/CRESS Newsletter, Sister Mary of the Cross reported the development and implementation of a flexible rotating schedule for Father Yermo High School in El Paso, Texas, a small school serving middle and lower class families.

Pahranagat Valley High School located in Alamo, Nevada, has developed a successful hand-generated daily modular schedule for a small student population (10).

Virgin Valley High School in Mesquite, Nevada, has moved from an S^4 computer-generated schedule to "a hand-generated modular schedule which is adaptable in schools with enrollments of 200 to 300 students" (11).

Etowah County School District in Gadsden, Alabama, uses a flexible rotating schedule in its three rural high schools (12).

REFERENCES

1. Trump, J. Lloyd, Images of the Future. Washington, D. C.: National Association of Secondary-School Principals, National Education Association, 1959.

2. McQueen, Mildred, "Individualized Instruction," Education Digest, April 1971, p. 26.

3. Swenson, Gardner, and Donald Keys, Providing for Flexibility in Scheduling and Instruction. Successful School Management Series. Englewood Cliffs, N. J.: Prentice-Hall, 1966, p. 14-17.

4. Manlove, Donald C., and David W. Beggs III, Bold New Adventure Flexible Scheduling Using the IndiFlexS Model. Bloomington: Indiana University Press, 1965, p. 80.

5. Austin, David B., and Noble Gividen, The High School Principal and Staff Develop the Master Schedule. Secondary School Administration Series. New York: Teachers College, Columbia University, Bureau of Publications, 1960, p. 80.

6. The Stanford School Scheduling System, Stanford, Calif.: Stanford University School of Education and Department of Industrial Engineering, 1968. (ED 028 501)

7. Murphy, Judith, and Robert Sutter. School Scheduling by Computer: The Story of GASP. New York: Educational Facilities Laboratories, Inc., 1964.

8. Manlove, op. cit., p. 161-163.

9. A Report on Flexible Scheduling. Sacramento: State Department of Education, Bureau of Program Planning and Research, 1971, p. 13-19.

10. Anderson, David Neil, Daily Modular Scheduling Practice at Pahranagat Valley High School. Report. Carson City: Nevada Western States Small Schools Project, 1966, 8p. (ED 027 993).

11. Wilson, Alfred P., Educational Innovations in Rural America. Las Cruces, N. M.: ERIC/CRESS, 1970, p. 26 (ED 045 241).

12. Ibid, p. 27.

TYPES OF FLEXIBLE SCHEDULES

SIMPLE BLOCK

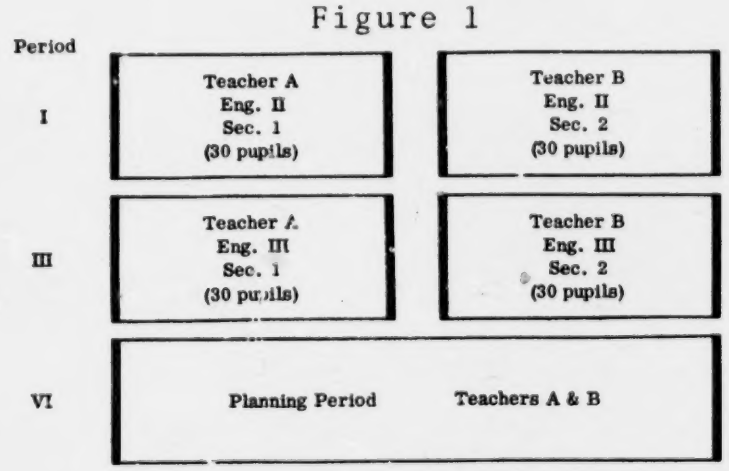
Simple Block schedules provide teachers with flexibility in varying group size for different learning activities.

Characteristics

1. Useful as an easy first step toward a more flexible schedule.
2. Can fit into the framework of a traditional schedule.
3. Avoids after-school planning sessions through common planning periods.
4. Restricts teachers to a relatively short block of time for varying learning activities.
5. It is the least flexible type of schedule; therefore, it is most satisfactory when used as a transitional form of scheduling.

Sample Schedule

Figure 1



Courtesy of
Educational Research
Council of America
Cleveland, Ohio

Figure 2

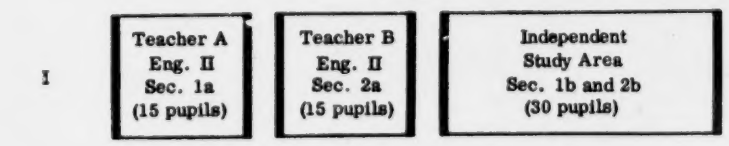
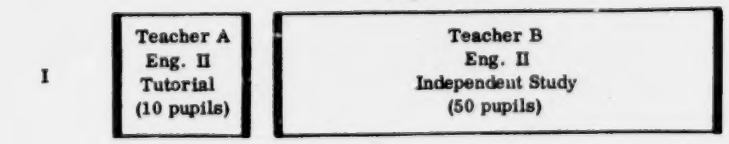


Figure 3



Figures 1, 2, and 3 illustrate how periods may be combined for large-group instruction or regrouped for small-group discussion, remedial help, or independent study. This simple block schedule may accommodate teaching teams by giving each team member an identical schedule. For example, two English teachers may form a teaching team. Each is scheduled for different sections of the same course during the same period.

Figures 2 and 3 show patterns where teachers may work within a given period of time to accommodate student needs.

BACK-TO-BACK

Back-to-Back schedules allow flexibility to be introduced within the framework of a traditional schedule by increasing the number of time blocks from one to two.

Characteristics

1. Additional possibilities for team teaching compared to the simple block design.

2. Permits learning activities requiring more than one class period to proceed without interruption.

3. Time arrangements and grouping patterns are left to the judgment of teachers, who can adjust the schedule to fit their teaching needs.

Sample Schedule

Figure 4

Period				
I	Teacher A Eng. II Sec. 1 (30 pupils)	Teacher B Eng. II Sec. 2 (30 pupils)	Teacher C S.S. II Sec. 3 (30 pupils)	Teacher D S.S. II Sec. 4 (30 pupils)
II	Teacher A Eng. II Sec. 3 (30 pupils)	Teacher B Eng. II Sec. 4 (30 pupils)	Teacher C S.S. II Sec. 1 (30 pupils)	Teacher D S.S. II Sec. 2 (30 pupils)

Courtesy of
Educational Research
Council of America
Cleveland, Ohio

Figure 5

I	Teachers A-B Eng. II Sec. 1,2,3,4 (120 pupils)	Teachers C-D Planning Period
II	Teachers A-B Planning Period	Teachers C-D S.S. II Sec. 1,2,3,4 (120 pupils)

Figure 6

I	Teachers A-B Eng. II Sec. 1-2 (60 pupils)	Teachers C-D S.S. II Sec. 3-4 (60 pupils)
II	Eng. II Sec. 3-4	S.S. II Sec. 1-2

Figure 7

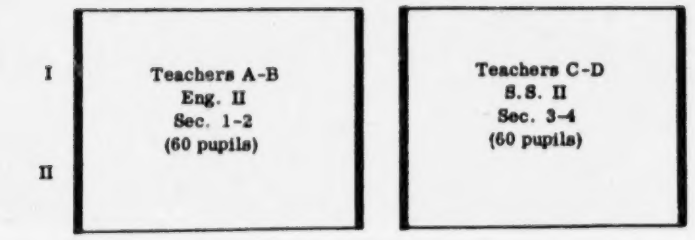
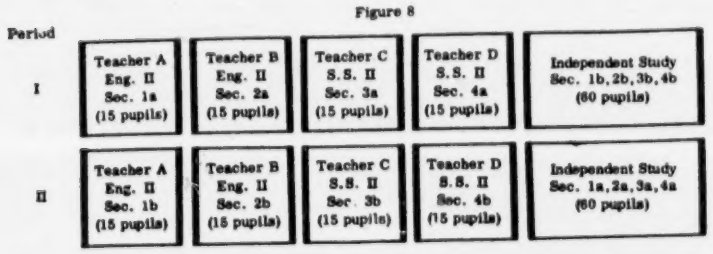


Figure 8


Period
I
II
Teacher A Eng. II Sec. 1a (15 pupils)
Teacher B Eng. II Sec. 2a (15 pupils)
Teacher C S.S. II Sec. 3a (15 pupils)
Teacher D S.S. II Sec. 4a (15 pupils)
Independent Study Sec. 1b, 2b, 3b, 4b (60 pupils)
Teacher A Eng. II Sec. 1b (15 pupils)
Teacher B Eng. II Sec. 2b (15 pupils)
Teacher C S.S. II Sec. 3b (15 pupils)
Teacher D S.S. II Sec. 4b (15 pupils)
Independent Study Sec. 1a, 2a, 3a, 4a (60 pupils)

Courtesy of Educational Research Council of America Cleveland, Ohio

Figure 9

Period	First Day	Second Day					Third Day				
		I.S.	S.G.				I.S.	S.G.			
			A	B	C	D		A	B	C	D
I	Large Group Sec. 1, 2, 3, 4 Teachers A-B or C-D	Sec. 3-4	1a	1b	2a	2b	Sec. 1-2	3a	3b	4a	4b

The diagrams are variations of structure involving two social science teachers, two English teachers, and 120 students scheduled back-to-back in a two period time allocation (Figure 4). For example, all 120 students could be assembled at one time (Figure 5) for any portion of the two periods or for the complete block of time. One teacher could then show a film, give a lecture, demonstration, or schedule a field trip for all sections and not have to repeat activities. Figures 5, 6, and 7 illustrate ways of grouping the students to allow for teacher planning and large group instruction. Figure 8 illustrates how teachers may provide small group experiences for all students. Figure 9 shows a sample 3-day schedule. The group structure depends upon the planned learning activities. Small group and independent activities could be scheduled for a week or more without any large group instruction.

INTERDISCIPLINARY

Interdisciplinary schedules allow team teaching between two or more disciplines and can fit into a traditional type schedule of six periods a day.

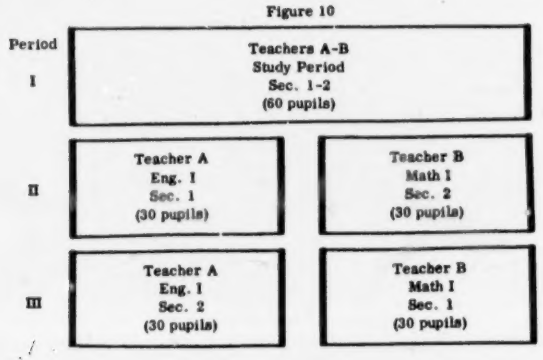
Characteristics

1. Allows implementation of team teaching in small schools that have only one teacher for each subject.

2. Encourages teachers to correlate their subjects.

Sample Schedule

Figure 10



Courtesy of Educational Research Council of America, Cleveland, Ohio

Figure 10 shows two teachers of different disciplines who have a three period block of time in which to operate. The only requirement is that pupils and teachers be scheduled together at least one period per day.

SCHOOL-WIDE BLOCK

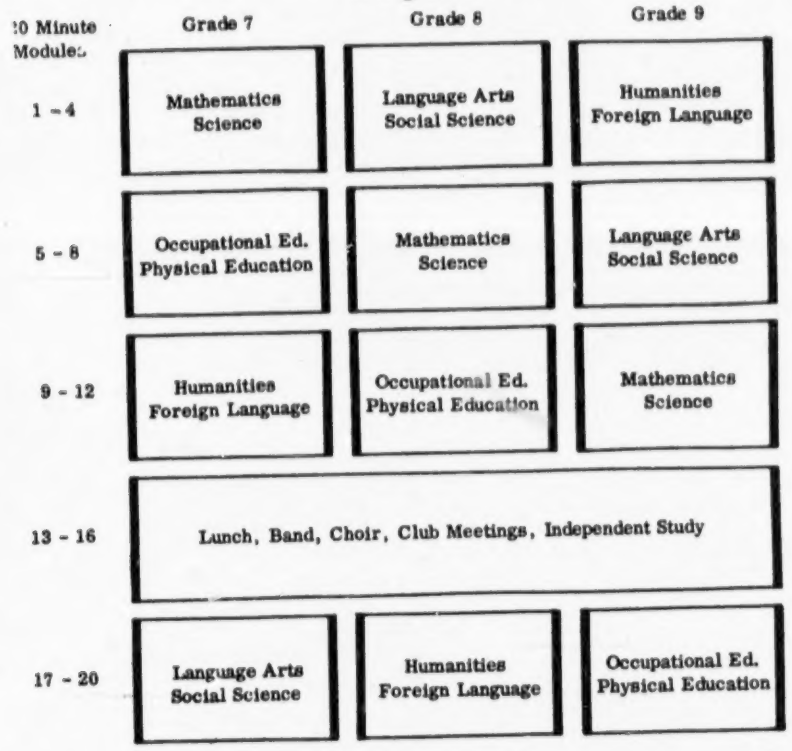
School-Wide Block schedules introduce the idea of time modules.

Characteristics

1. Allows teachers to determine the extent to which team teaching is implemented.
2. Allows time for teaching team preparation and planning.
3. Allows time for student-teacher conferences and independent study.

Sample Schedule

Figure 11



Courtesy of Educational Research Council of America Cleveland, Ohio

Figure 11 shows a schedule which uses team teaching in the core subjects across grade levels. The modules of time may be divided equally between the two subject areas within each block or scheduled differently each day. Some teams may correlate curriculum content and work together constantly. Planning time for teachers is built into the schedule; humanities and foreign language teachers are not instructing during modules 5-8.

SCHOOL-WIDE BLOCK
(Variation)

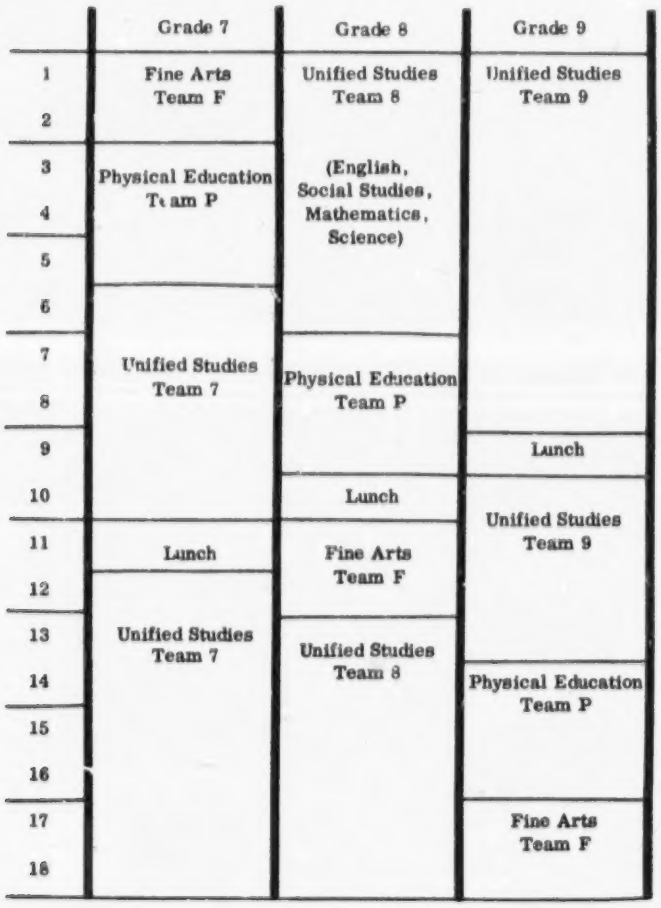
Characteristics

1. Allows cross-discipline teams to function in large blocks of time.

2. Teams make decisions as to the amount of time and the emphasis placed on individual subject areas.

Sample Schedule

Figure 12



Courtesy of
Educational
Research Council
of America
Cleveland, Ohio

Figure 12 illustrates cross-discipline teams operating within each grade level. Special teams (fine arts and physical education) meet all grades at varying times throughout the day.

OPEN-LAB

The Open-Lab schedule provides students unstructured time to take advantage of a wide range of curricular offerings and to make use of unscheduled facilities on a student interest basis.

Characteristics

1. Uncomplicated to implement.
2. Makes provision for student decision making through an elective block ideally suited for exploratory programs.

Sample Schedule

Figure 13

20 Minute Modules	Eng.-S.S.	Math-Science	Related Arts-I.S.
1 - 4	Grade 9	Grade 7	Grade 8
5 - 8	Grade 7	Grade 8	Grade 9
9 - 10	Lunch		
11 - 14	Grade 8	Grade 9	Grade 7
15 - 18	Student Non-Structured Time for "Core," Related Arts, Band, Choir, and Independent Study.		

Courtesy of Educational Research Council of America Cleveland, Ohio

In Figure 13, interdisciplinary teams meet with all grade levels at different times during the day. Each student has a block of time* to pursue individual interests in areas of the curriculum not included in the basic subjects.

*(referred to as Related Arts in Figure 13)

/

ROTATING

Rotating schedules rearrange the conventional schedule without changing the basic design. Classes are rotated so they do not meet at the same time each day.

Characteristics

1. Ideal to bring about staff awareness of advantages of a flexible schedule.

2. Eliminates the monotony of a routine schedule.

3. Allows all classes to meet at optimum learning times for students.

Sample Schedule

Figure 14

Period	M	T	W	T	F
I	1	2	3	5	6
II	2	3	5	6	1
III	3	5	6	1	2
IV	4	4	4	4	4
V	5	6	1	2	3
VI	6	1	2	3	5

Figure 15

Period	M	T	W	T	F
I	1	7	6	5	4
II	2	x	7	6	5
III	3	2	1	7	6
IV	4	3	2	1	7
V	5	4	3	y	1
VI	6	5	4	3	2

Courtesy of Educational Research Council of America Cleveland, Ohio

Figure 16

No. of Minutes Per Period	M	T	W	T	F
45	1	6	5	4	1
45	2	1	6	5	3
60	3	2	1	6	4
60	4	3	2	1	5
90	5	4	3	2	6

Figure 14 illustrates a rotating schedule wherein each class meets at a different time each day with the exception of fourth period classes which remain constant. This facilitates fixed lunch periods or shared services with other schools. The schedule in figure 15 rotates to allow the student to take seven different classes while retaining the six-period day. The x & y periods can be placed anywhere to be used for activity periods, pep rallies, or assembly programs. They may be placed at the end of the day in order to dismiss students early for staff meetings. Figure 16 introduces variable period length into the rotating schedule.

BLOCK-MODULAR

The Block-Modular schedule combines an alternate-day schedule with blocks of time and modules.

Characteristics

1. Allows the student to take more courses than does a conventional schedule.
2. Facilities and teachers serve twice as many students with the alternating feature.
3. Modules within blocks accommodate variable length classes.

Sample Schedule

Figure 17

15 Minute Modules	Grade 7 I	Grade 7 II	Grade 7 III	Grade 7 IV	Grade 8 I	Grade 8 II	Grade 8 III	Grade 8 IV	Grade 9 I	Grade 9 II	Grade 9 III	Grade 9 IV
1	Lang.	Health	Math Science		P. E.	Occ.	Humanities		Math Science		English S. S.	
2											Lang.	Type
3	English S. S.											
4					Humanities		P. E.	Occ.	Lang.	Health	English S. S.	
5			Lang.	Type					Math Science			
6												
7												
8	Health	Lang.	English S. S.		English S. S.		Math Science		P. E.	Occ.	Humanities	
9							Type	Lang.				
10	Math Science											
11					Lang.	Health	Math Science		Humanities		P. E.	Occ.
12			Type	Lang.	English S. S.							
13												
14	Clubs Orchestra Band		Choir I. S. Lunch		Clubs Orchestra Band		Choir I. S. Lunch		Clubs Orchestra Band		Choir I. S. Lunch	
15												
16												
17	P. E.	Occ.	Humanities		Health	Lang.	English S. S.		English S. S.		Math Science	
18											Type	Lang.
19					Math Science				Health	Lang.	Math Science	
20	Humanities		P. E.	Occ.					English S. S.			
21							Lang.	Type				

Courtesy of Educational Research Council of America Cleveland, Ohio

The schedule shown in Figure 17, while basically arranged in two-hour blocks, is broken down into 15-minute modules. Each Roman numeral across the top represents approximately 100 students. Health and physical education can alternate with typing and occupational education to allow the student to take 10 subjects. The schedules for different grade levels are coordinated so one of the three core teams for each block is free for planning or for reinforcement of the other teams.

FLEXIBLE MODULAR

Flexible Modular schedules are based on the concept that maximum learning requires varying activities and grouping patterns. Schedules of this type facilitate organization of course structure, the use of different instructional modes, variable time allocations, and appropriate teacher-student ratios.

Characteristics

1. Allows most flexibility for instructional modes.
2. Meets specific daily instructional needs.
3. Provides for periods of variable length.
4. Individualizes the curriculum both for slow and fast learners.
5. Allows students to take more responsibility for their own education and to become more involved in the learning process.
6. Allows students to take as many as ten or twelve courses.
7. Facilities not used during a given module may become an open laboratory for students.
8. This schedule is frequently so complex to establish that it often requires the use of computer services.

Sample Schedule

Figure 18

	Monday	Tuesday	Wednesday	Thursday	Friday
1	World Geography Small Group Room 110	World Geography Small Group Room 110	Biology 2 Small Group or Lab Room 126	World Geography Small Group Room 110	English 3 Small Group Room 111
2					
3					
4	I.S. (Pupil Options) Open Lab I.M.C. Lounge Art etc.	I.S.		I.S.	I.S.
5		Art 1 Room 118	I.S.	Art 1 Room 118	
6			Physical Science Large Group Room 203		Physical Science Small Group or Lab Room 206
7					
8					
9		I.S.	I.S.	I.S.	
10	Lunch		Lunch	Lunch	Lunch
11					
12	I.S.	Lunch	I.S.	Language Lab	I.S.
13	Math 2 Large Group Room 119		Math 2 Large Group Room 119		
14		I.S.			
15				English 3 Small Group Room 111	Math 2 Small Group Room 201
16	I.S.	English 3 Large Group Room 121	I.S.		
17	Physical Science Small Group or Lab Room 206			I.S.	World Geography Large Group Room 126
18					
19		Biology 2 Small Group or Lab Room 126		Biology 2 Large Group Room 126	I.S.
20					
21	I.S.				
22	French 1 Room 109		French 1 Room 109		French 1 Room 109
23		Math 2 Small Group Room 201		Math 2 Small Group Room 201	
24					

Courtesy of Educational Research Council of America Cleveland, Ohio

Figure 18 is a student schedule in which no class meets five days a week and no two days are the same. Unscheduled time for students (referred to as I. S. in Figure 18) may be used for independent study, student-teacher conferences, special projects, etc.

24/25

BIBLIOGRAPHY

ACCESSION NUMBER: ED010972

PUBLICATION DATE: 66

TITLE: RESPONSIBILITIES OF A MEMBER UMSSP SCHOOL.

PERSONAL AUTHOR: KNUDSVIG, EVERETT C.

DESCRIPTOR: CORRESPONDENCE COURSES; CURRICULUM; *FLEXIBLE SCHEDULING; *INSTRUCTIONAL AIDS; LIBRARY FACILITIES; *SMALL SCHOOLS

IDENTIFIER: AMPLIFIED TELEPHONE; UPPER MIDWEST SMALL SCHOOLS PROJECT

DESCRIPTIVE NOTE: 8P.

THE EFFECTIVE USE OF FLEXIBLE SCHEDULING, INSTRUCTIONAL AIDS, AND MODERN TECHNOLOGICAL TECHNIQUES IN SMALL SCHOOL SYSTEMS IS IMPERATIVE IF THE INDIVIDUAL STUDENT NEEDS ARE TO BE MET. FLEXIBLE SCHEDULING AND THE USE OF CORRESPONDENCE COURSES MAXIMIZE OPPORTUNITIES IN A LIMITED CURRICULUM. THE USE OF AN AMPLIFIED TELEPHONE IN A CLASSROOM IS DISCUSSED. THE NECESSITY OF WELL-EQUIPPED LIBRARIES TO SUPPLEMENT THE CURRICULUM CANNOT BE OVERLOOKED. THIS ARTICLE IS PUBLISHED IN "THE COLLEGE OF EDUCATION RECORD." (JM)

ACCESSION NUMBER: ED011752

PUBLICATION DATE: JAN67

TITLE: THE MODULE--A NEW MODE FOR GAINING FLEXIBILITY.

PERSONAL AUTHOR: PALMER, L. R.

DESCRIPTOR: *CURRICULUM DEVELOPMENT; *FLEXIBLE SCHEDULES; GROUPING (INSTRUCTIONAL PURPOSES); *JUNIOR HIGH SCHOOLS; *LANGUAGE INSTRUCTION; LANGUAGE LEARNING LEVELS; *SCHEDULE MODULES; TEACHING LOAD; TIME BLOCKS

IDENTIFIER: MINNESOTA; MINNETONKA EAST JUNIOR HIGH SCHOOL

DESCRIPTIVE NOTE: 8P.

FLEXIBLE SCHEDULING BENEFITS BOTH STUDENTS AND TEACHERS BECAUSE, IN ANY SPECIFIC SCHOOLS EDUCATIONAL PROGRAM, IT MAKES THE BEST AND MOST APPROPRIATE USE OF TIME, SPACE, EQUIPMENT, AND TEACHERS TALENTS. SUCH SCHEDULING HAS BEEN USED SUCCESSFULLY AT MINNETONKA EAST JUNIOR HIGH SCHOOL, WHERE THE SCHOOL DAY IS DIVIDED INTO 15 DAILY TIME MODULES OF 28 MINUTES EACH. STUDENTS USE ONE MODULE FOR LUNCH AND 14 FOR CLASSES, WITH TWO MODULES PER DAY DEVOTED TO SOME SUBJECTS AND ONE TO OTHERS. TEACHERS USE 10 FOR TEACHING, THREE OR FOUR FOR PREPARATION AND EVALUATION, AND ONE FOR LUNCH. WITH THIS SCHEDULE STUDENTS ARE ABLE TO FOLLOW A FOREIGN LANGUAGE SEQUENCE THROUGHOUT THE 3 YEARS OF JUNIOR HIGH SCHOOL AND CONTINUE IT IN HIGH SCHOOL THROUGH THE 12TH GRADE IF THEY DESIRE. THE ARTICLE INCLUDES SAMPLE SCHEDULES FOR TEACHERS AND STUDENTS AND A CHART OF CURRICULUM OFFERINGS IN GRADES 7 THROUGH 9, SHOWING THE NUMBER OF SCHEDULE MODULES DEVOTED TO EACH SUBJECT DAILY. THIS ARTICLE IS PUBLISHED IN THE "MINNESOTA FOREIGN LANGUAGE BULLETIN," VOLUME 7, NUMBER 2, JANUARY 1967. (AM)

ACCESSION NUMBER: ED012392

PUBLICATION DATE: SEP66

TITLE: A SURVEY AND INVESTIGATION OF FOREIGN LANGUAGE INSTRUCTION UNDER CONDITIONS OF FLEXIBLE SCHEDULING.

PERSONAL AUTHOR: ALLEN, DWIGHT W. ; POLITZER, ROBERT L.

DESCRIPTOR: *FLEXIBLE SCHEDULING; *INDIVIDUAL INSTRUCTION; *LANGUAGE INSTRUCTION; *LANGUAGE LABORATORIES; *LANGUAGE LEARNING LEVELS

IDENTIFIER: STANFORD

DESCRIPTIVE NOTE: 99P.

CURRENT USES OF FLEXIBLE SCHEDULING IN THE FOREIGN LANGUAGE CURRICULUM WERE STUDIED (1) BY AN INVESTIGATION OF THE FOREIGN LANGUAGE PROGRAMS IN FIVE TRADITIONALLY SCHEDULED SCHOOLS AND FIVE FLEXIBLY SCHEDULED SCHOOLS AND (2) BY A REVIEW OF THE FINDINGS OF THE STUDY BY A CONFERENCE OF SPECIALISTS IN FOREIGN LANGUAGE EDUCATION, FLEXIBLE SCHEDULING, AND ADMINISTRATION. WHAT HAD BEEN REVEALED BY THE INVESTIGATION OF DIFFERENT EXPERIENCES WITH FLEXIBLE SCHEDULING ABOUT ITS ADVANTAGES, POTENTIALS, AND DANGERS WAS REVIEWED BY THE CONFERENCE TO FORMULATE RECOMMENDATIONS FOR (1) THE USE OF FLEXIBLE SCHEDULING IN THE FOREIGN LANGUAGE CURRICULUM, AND (2) RESEARCH TO DETERMINE GUIDELINES FOR OPTIMUM USE OF FLEXIBLE SCHEDULING. CONCLUSIONS OF THE CONFERENCE INDICATED THAT FLEXIBLE SCHEDULING HAD MADE DISAPPOINTINGLY LITTLE IMPACT ON FOREIGN LANGUAGE EDUCATION. FOUR FACETS OF LANGUAGE TEACHING WERE IDENTIFIED WHICH COULD BE FURTHER DEVELOPED AND USED ALONG WITH FLEXIBLE SCHEDULING TO PRODUCE SIGNIFICANT IMPROVEMENT IN FOREIGN LANGUAGE EDUCATION--INDIVIDUALIZED INSTRUCTION USING PROGRAMED MATERIALS AND NEW PATTERNS OF PACING, USE OF THE LANGUAGE LABORATORY, USE OF LARGE-GROUP INSTRUCTION, AND THE DEVELOPMENT OF VARIOUS TEACHING STAFF PATTERNS. FLEXIBLE SCHEDULING WAS VIEWED AS A MEANS OF PROVIDING INDIVIDUALIZATION FOR PUPIL, SUBJECT, AND INSTRUCTOR. THE SMALL-GROUP MEETINGS OFFERED SOMEWHAT MORE INDIVIDUALIZED INSTRUCTION, BUT MOST TEACHERS BELIEVED SELF-INSTRUCTIONAL MATERIALS WERE NEEDED TO USE THE FULL POTENTIAL OF FLEXIBLE SCHEDULING FOR INDIVIDUALIZED INSTRUCTION. AREAS OF FLEXIBLE SCHEDULING WHERE MORE RESEARCH WAS NEEDED WERE IDENTIFIED. (AL)

INSTITUTION NAME: STANFORD UNIV., CALIF.

ACCESSION NUMBER: ED012683

PUBLICATION DATE: JUL66

TITLE: APPLICATIONS OF RESEARCH TO THE PROBLEM OF INSTRUCTIONAL FLEXIBILITY.

PERSONAL AUTHOR: SARTAIN, HARRY W.

DESCRIPTOR: *CLASS ORGANIZATION; EVALUATION TECHNIQUES; FLEXIBLE SCHEDULING; *GROUPING (INSTRUCTIONAL PURPOSES); *GROUPING PROCEDURES; INDIVIDUAL DIFFERENCES; NONGRADED SYSTEM; *READING INSTRUCTION; TEAM TEACHING

IDENTIFIER: PITTSBURGH

DESCRIPTIVE NOTE: 20P.

SELECTED RESEARCH ON THE PROBLEM OF INSTRUCTIONAL FLEXIBILITY IS SURVEYED AND DISCUSSED. BROAD TOPICS OF DISCUSSION ARE DEPARTMENTALIZATION, HOMOGENEOUS SECTIONING, INTERCLASS ABILITY SECTIONING, THE EXTENT OF VARIABILITY IN READING DEVELOPMENT, AND PRACTICES THAT MAY INCREASE FLEXIBILITY. AMONG THOSE PRACTICES TO INCREASE FLEXIBILITY ARE TEAM TEACHING, NONGRADED, MULTIAGE SECTIONING, AND THE CONTINUOUS PROGRESS PLAN. CRITERIA FOR EVALUATING ORGANIZATIONAL PATTERNS ARE LISTED. IT IS POINTED OUT THAT SCHOOL ORGANIZATION PLANS FREE TEACHERS TO PROVIDE ADEQUATELY FOR DIFFERENCES. A BIBLIOGRAPHY IS INCLUDED. THIS PAPER WAS PRESENTED AT THE ANNUAL CONFERENCE AND COURSE ON READING (22D, UNIVERSITY OF PITTSBURGH, JULY 5-15, 1966), AND PUBLISHED IN A REPORT OF THAT MEETING, "PROGRESS AND PROMISE IN READING INSTRUCTION," BY THE SCHOOL OF EDUCATION, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA 15213. (BK)

INSTITUTION NAME: PITTSBURGH UNIV., PA. SCHOOL OF EDUCATION.

ACCESSION NUMBER: ED018414

PUBLICATION DATE: 67

TITLE: DEVELOPMENT IN ENGLISH AT HORTON WATKINS HIGH SCHOOL, ST. LOUIS, MISSOURI.

PERSONAL AUTHOR: WHITE, CHRISTINE M.

DESCRIPTOR: AUDIOVISUAL AIDS; EDUCATIONAL INNOVATION; *ENGLISH INSTRUCTION; *FLEXIBLE SCHEDULING; *INDEPENDENT STUDY; *INDIVIDUALIZED PROGRAMS; LARGE GROUP INSTRUCTION; READING PROGRAMS; SECONDARY EDUCATION; SENIOR HIGH SCHOOLS; SMALL GROUP INSTRUCTION; *STUDENT RESEARCH; STUDENT SEMINARS; TEACHING PROCEDURES; TEAM TEACHING

IDENTIFIER: INDIVIDUALZIED READING

DESCRIPTIVE NOTE: 14P.

INNOVATION ENGLISH AT HORTON WATKINS HIGH SCHOOL, ST. LOUIS, MISSOURI, IS A MODIFIED FLEXIBLE SCHEDULING PROGRAM DESIGNED TO ENCOURAGE HIGH SCHOOL STUDENTS BOTH TO WORK INDEPENDENTLY AND TO SHARE THEIR REACTIONS AND IDEAS WITH OTHERS. EACH OF THE APPROXIMATELY 400 STUDENTS PARTICIPATING IN THE PROGRAM ATTENDS ONE LARGE GROUP INSTRUCTIONAL SESSION (FREQUENTLY TAUGHT BY A TEAM), TWO SEMINAR DISCUSSIONS WITH A TEACHER AND 10 OTHER STUDENTS, AND TWO INDEPENDENT STUDY PERIODS EACH WEEK. DURING THE LATTER PERIODS, HE MAY STUDY INDEPENDENTLY, USE THE LIBRARY, VIEW A FILM STRIP, CONFER WITH A TEACHER TO WORK OUT AN INDIVIDUALIZED PLAN OF STUDY, OR TAKE AN EXAMINATION. PROGRESS IS FACILITATED BY THE USE OF STUDENT "WORK PACKAGES" WHICH EXPLAIN A UNIT'S PURPOSE AND PROVIDE AN OUTLINE AND EXPLANATION OF ACTIVITIES TO BE COMPLETED BY THE STUDENT. FREEDOM IS GIVEN TO TEACHERS TO CREATE AND STRUCTURE THEIR OWN COURSES, AND TO STUDENTS TO PURSUE THEIR INDEPENDENT STUDY, RESEARCH, AND CREATIVE PROJECTS. IN ADDITION TO TRADITIONAL COURSES, THE CURRICULUM INCLUDES (1) AN AMERICAN STUDIES COURSE WHICH EXAMINES THE RELATIONSHIPS AMONG LITERATURE, HISTORY, SOCIOLOGY, AND LITERARY CRITICISM, (2) A CREATIVE WRITING COURSE, AND (3) A POETRY COURSE IN WHICH POETIC TECHNIQUES AND DEVICES ARE STUDIED. AN ADDITIONAL PROGRAM OUTSIDE INNOVATION ENGLISH IS A TENTH-GRADE INDIVIDUALIZED READING PROJECT, THE LADUE EXPERIMENTAL ENGLISH PROGRAM. INCLUDED IS A SMAPLE WORK PACKAGE ON "MACBETH." (DL)

INSTITUTION NAME: HORTON WATKINS HIGH SCHOOL, ST. LOUIS, MO.

ACCESSION NUMBER: ED018960

TITLE: COMPUTER SCHEDULING EDUCATIONAL REFORM. USING S-4--THE STANFORD SCHOOL SCHEDULING SYSTEM.

PERSONAL AUTHOR: BERGQUIST, ROBERT

DESCRIPTOR: AUTOMATION; COMPUTER ASSISTED INSTRUCTION; *COMPUTER ORIENTED PROGRAMS; COMPUTER PROGRAMS; *COMPUTERS; CURRICULUM; DATA PROCESSING; *FLEXIBLE SCHEDULING; *INDEPENDENT STUDY; INDIVIDUAL INSTRUCTION; INDIVIDUALIZED CURRICULUM; INDIVIDUAL STUDY; SCHEDULE MODULES; SCHEDULING; SCHOOL SCHEDULES; SIMULATION

IDENTIFIER: S-4

NEW TECHNIQUES IN SCHEDULING PERMIT MORE EFFICIENT USE OF TIME FOR SCHOOL ADMINISTRATORS, GREATER FLEXIBILITY IN PROGRAMING, AND PROVIDES A SEEDBED FOR INNOVATION. THE STANFORD SCHOOL SCHEDULING SYSTEM (S-4) IS A SET OF PROGRAMS THAT AUTOMATES THE SCHEDULING PROCESS. THE FIRST OF THE FOUR PROGRAMS, CTTA, (CARD TO TAPE AND AUDIT), DIRECTS THE COMPUTER IN AUTOMATICALLY CHECKING FOR MORE THAN 100 TYPES OF OMISSIONS AND INCONSISTENCIES. WHEN ALL DETECTABLE ERRORS HAVE BEEN ELIMINATED THE PROGRAM DIRECTS THE PREPARATION OF COURSE DATA PACKETS WHICH INCLUDE DETAILED INFORMATION ON EACH COURSE. THE SECOND PROGRAM, SSP, (SCHOOL SCHEDULING PROGRAM), BUILDS THE COURSE DATA PACKETS INTO A PRELIMINARY MASTER SCHEDULE. IT SELECTS TIME PATTERNS, ASSIGNS TEACHERS AND ROOMS, AND UPDATES RECORDS AFFECTED BY SUCH ASSIGNMENTS. THE THIRD PROGRAM, PTWS, (PROGRAM TO WRITE SCHEDULES), DOES THE SORTING TO CONVERT THE CLASS LISTS TO TEACHER SCHEDULES, ROOM SCHEDULES, AND INDIVIDUAL STUDENT SCHEDULES. THE LAST OF THE FOUR PROGRAMS IS CALLED TRANSLATE. IT TRANSLATES THE NUMERIC CODES IN WHICH THE SCHEDULE EXISTS IN THE COMPUTER INTO NAMES AND NUMBERS THAT CAN BE READ BY AND ARE RELEVANT TO THE INDIVIDUAL SCHOOL. SUPPLEMENTARY PROGRAMS ALSO USED ARE-- UPDATING AFTER MANUAL CHANGE, SAP, (THE STUDENT ASSIGNMENT PROGRAM), RAP, (THE ROOM ASSIGNMENT PROGRAM), AND UDCL, (UPDATE CLASS LIST). NONE OF THESE PROGRAMS ACCOMPLISH CURRICULUM INNOVATION BUT THEY CAN PROVIDE THE TIME AND MEANS FOR ACHIEVING THAT GOAL. THIS DOCUMENT IS AVAILABLE FROM THE SCHOOL PLANNING LABORATORY, SCHOOL OF EDUCATION, STANFORD UNIVERSITY, STANFORD, CALIFORNIA 94305. (RH)

INSTITUTION NAME: STANFORD UNIV., CALIF. SCHOOL PLANNING LAB.

ACCESSION NUMBER: ED018999

PUBLICATION DATE: 62

TITLE: DESIGNS FOR SMALL HIGH SCHOOLS.

PERSONAL AUTHOR: NIMNICHT, GLENDON P. ; PARTRIDGE, ARTHUR R.

DESCRIPTOR: AGRICULTURAL EDUCATION; BUILDING INNOVATION; BUSINESS EDUCATION; *CLASSROOM DESIGN; EDUCATIONAL FACILITIES; *FLEXIBLE SCHEDULING; *HIGH SCHOOLS; HOMEMAKING EDUCATION; INDIVIDUAL INSTRUCTION; *MULTIPURPOSE CLASSROOMS; MUSIC EDUCATION; PHYSICAL EDUCATION FACILITIES; *SCHOOL DESIGN; TEAM TEACHING

IDENTIFIER: CATSKILL AREA PROJ; ROCKY MOUNTAIN AREA PROJ

BY MULTIPLE-CLASS TEACHING AND FLEXIBLE SCHEDULING, SMALL HIGH SCHOOLS CAN OFFER EDUCATIONAL PROGRAMS COMPARABLE TO THOSE OFFERED BY LARGE HIGH SCHOOLS. WITH ATTENTION TO FACILITY DESIGN, NOT ONLY CAN SCIENCE, MATHEMATICS, FOREIGN LANGUAGE, ART, BUSINESS, INDUSTRIAL ARTS, HOMEMAKING, ENGLISH, AND SOCIAL STUDIES BE OFFERED TO TWO OR MORE GROUPS OF STUDENTS IN THE SAME ROOM AT THE SAME TIME UNDER ONE TEACHER, BUT THEY CAN BE OFFERED IN SUCH A WAY THAT INDIVIDUAL INSTRUCTION IS GIVEN. A MUSIC APPRECIATION PROGRAM CAN BE PROVIDED, ENRICHING THE MUSICAL EXPERIENCE OF THE STUDENTS. PHYSICAL EDUCATION FACILITIES MAY BE MADE ADEQUATE BY OVERLAP IN USAGE AND BY COMMUNITY COOPERATION AND FINANCING. FACILITIES FOR FARM MECHANICS CAN BE COMBINED WITH THOSE OF GENERAL INDUSTRIAL ARTS, SO THAT WITH THE ADDITION OF AN ACTUAL FARM EXPERIENCE, AN EXCELLENT COURSE CAN BE OFFERED IN VOCATIONAL AGRICULTURE. MULTIPLE USE OF SPACE AND FACILITIES CAN ALSO APPLY TO THE GYMNASIUM, THE AUDITORIUM, THE COMMONS (LUNCHROOM AND CORRIDORS), AND THE ADMINISTRATIVE AREA. THIRTY-SEVEN SELECTED SCHOOLS WERE VISITED IN 22 STATES FOR THIS STUDY. THIS DOCUMENT IS AVAILABLE ON REQUEST FROM EDUCATIONAL PLANNING SERVICE, COLORADO STATE COLLEGE, GREELEY, COLORADO. (MF)

INSTITUTION NAME: COLORADO STATE COLLEGE, GREELEY.

ACCESSION NUMBER: ED021657

PUBLICATION DATE: APR 66

TITLE: SCHEDJLING FOR FLEXIBILITY IN SMALL SCHOOLS.

PERSONAL AUTHOR: JESSER, DAVID L., ED.,; STUTZ, ROWAN C., ED.

DESCRIPTOR: *ADMINISTRATOR ROLE; *COMPUTER ORIENTED PROGRAMS; CONSULTANTS; FACULTY; *FLEXIBLE SCHEDULING; RELEASED TIME; *SCHEDULE MODULES; SCHOOL SCHEDULES; *SMALL SCHOOLS; STUDENTS; STUDY HABITS; TIME BLOCKS

IDENTIFIER: WESTERN STATES SMALL SCHOOLS PROJECT

DESCRIPTIVE NOTE: 20P.

IN ORDER TO PROVIDE A WIDER VARIETY OF CURRICULUM OFFERINGS AND MEET THE INDIVIDUAL NEEDS OF STUDENTS, THE WESTERN STATES SMALL SCHOOLS PROJECT (WSSP) REALIZED IT WOULD BE NECESSARY TO REVISE OR ALTER DRASTICALLY THE EXISTING ORGANIZTIONAL STRUCTURE OF EDUCATIONAL PROGRAMS. MODULAR SCHEDULING HAS BECOME THE MOST POPULAR METHOD OF MEETING THIS NECESSITY IN THE WSSP. ADVANCES IN COMPUTER TECHNOLOGY HAVE MADE THIS APPROACH POSSIBLE AND AID GREATLY IN THE PROVISION OF FLEXIBILITY IN SCHEDULING. THE PARTICIPATING SCHOOLS CHARACTERISTICALLY APPROACHED THE IMPLEMENTATION OF THIS METHOD IN THREE PHASES: (1) THE EXPLORATORY PHASE; (2) THE DEVELOPMENTAL PHASE; AND (3) THE OPERATIONAL PHASE. DESCRIPTIONS OF THESE PHASES AND THE ROLE OF THE ADMINISTRATOR AND THE CONSULTANTS NECESSARY FOR THE PROGRAM ARE PROVIDED. (DK)

INSTITUTION NAME: WESTERN STATES SMALL SCHOOLS PROJECT, SALT LAKE CITY, UTAH.

ACCESSION NUMBER: ED021662

PUBLICATION DATE: MAR 63

TITLE: A DESCRIPTIVE OUTLINE OF A MODULAR SCHEDULE, FLEXIBLE SCHEDULING USING THE DATA PROCESSING METHOD. A REPORT FROM VIRGIN VALLEY HIGH SCHOOL, MESQUITE, NEVADA.

PERSONAL AUTHOR: ALLAN, BLAINE W., COMP.

DESCRIPTOR: COURSE DESCRIPTIONS; *DATA PROCESSING; DATA SHEETS; *FLEXIBLE SCHEDULES; GROUP DISCUSSION; GROUP INSTRUCTION; *ILLUSTRATIONS; INDEPENDENT STUDY; INDIVIDUAL INSTRUCTION; INPUT OUTPUT; LARGE GROUP INSTRUCTION; MASTER PLANS; RECORDS (FORMS); *SCHEDULE MODULES; SMALL GROUP INSTRUCTION; *SMALL SCHOOLS; STUDY FACILITIES; TEACHER ROLE

IDENTIFIER: *VIRGIN VALLEY HIGH SCHOOL, MESQUITE, NEVADA

DESCRIPTIVE NOTE: 55P.

THE PROCEDURES, FORMS, AND PHILOSOPHY OF THE COMPUTERIZED MODULAR SCHEDULING PROGRAM DEVELOPED AT VIRGIN VALLEY HIGH SCHOOL ARE OUTLINED. THE MODULAR CONCEPT IS EVELOPED AS A NEW APPROACH TO COURSE STRUCTURE WITH EXPLANATIONS, EXAMPLES, AND WORKSHEETS INCLUDED. EXAMPLES OF COURSES OF STUDY, INPUT INFORMATION FOR THE DATA PROCESSING CENTER, OUTPUT INFORMATION FROM THE DATA PROCESSING CENTER, INSTRUCTIONS TO TEACHERS AND STUDENTS, GROUP INSTRUCTION TECHNIQUES, AND A MASTER SCHEDULE ADD SIGNIFICANCE TO THE NARRATIVE. THE DOCUMENT CONCLUDES WITH ANTICIPATED RESULTS. A RELATED DOCUMENT IS RC 002 478. (SW)

INSTITUTION NAME: NEVADA WESTERN STATES SMALL SCHOOLS PROJECT. CARSON CITY.

ACCESSION NUMBER: ED021669

PUBLICATION DATE: 64

TITLE: INDIVIDUALIZED LEARNING THROUGH COMPUTERIZED MODULAR SCHEDULING, SECOND REPORT OF SCHEDULING PROJECT AT VIRGIN VALLEY HIGH SCHOOL, MESQUITE, NEVADA.

PERSONAL AUTHOR: ALLAN, BLAINE W.

DESCRIPTOR: *COMPUTERS; CURRICULUM ENRICHMENT; *FLEXIBLE SCHEDULING; *INDEPENDENT STUDY; INDIVIDUAL INSTRUCTION; LABORATORY TRAINING; LARGE GROUP INSTRUCTION; RELEASED TIME; SCHEDULE MODULES; SECONDARY SCHOOLS; SMALL GROUP INSTRUCTION; *SMALL SCHOOLS; STUDENT GROUPING; *STUDENT REACTION; TEACHER ATTITUDES; TIME BLOCKS

IDENTIFIER: CLARK COUNTY SCHOOL DISTRICT; STANFORD SECONDARY SCHOOL PROJECT; *VIRGIN VALLEY HIGH SCHOOL, MESQUITE, NEVADA

DESCRIPTIVE NOTE: 50P.

IN 1963 STANFORD UNIVERSITY SELECTED VIRGIN VALLEY HIGH SCHOOL IN SOUTHERN NEVADA AS ONE OF FOUR PILOT SCHOOLS TO USE COMPUTERIZED MODULAR SCHEDULING. SCHEDULES FOR 165 STUDENTS AND ASSIGNMENTS FOR 14 TEACHERS WERE DEVELOPED AT THE STANFORD UNIVERSITY COMPUTER COMPUTATION CENTER USING 30-MINUTE MODULES WITH A TOTAL OF 80 MODULES PER WEEK. AFTER ONE YEAR OF OPERATION, IT WAS FOUND THAT GREATER OPPORTUNITY EXISTED FOR INDIVIDUALIZED INSTRUCTION, CURRICULUM OFFERINGS WERE INCREASED, RELEASE TIME FOR TEACHER PREPARATION RESULTED, AND STUDENT AND TEACHER ATTITUDES TOWARD LEARNING IMPROVED. REACTIONS AND RESPONSES FROM STUDENTS AND TEACHERS CONCERNING THE USE OF FLEXIBLE SCHEDULING ARE QUOTED IN THE DOCUMENT. A RELATED DOCUMENT IS RC 001 137. (JH)

INSTITUTION NAME: NEVADA WESTERN STATES SMALL SCHOOLS PROJECT. CARSON CITY.

ACCESSION NUMBER: ED021905

PUBLICATION DATE: OCT 67

TITLE: CHANGING TIMES ARE CHANGING SCHOOLS.

PERSONAL AUTHOR: BRADDOCK, CLAYTON

DESCRIPTOR: COMPUTER ORIENTED PROGRAMS; FLEXIBLE SCHEDULES; HIGH SCHOOLS; INSTRUCTIONAL INNOVATION; JUNIOR HIGH SCHOOLS; PROGRAM COSTS; *PROGRAM EFFECTIVENESS; *SCHEDULE MODULES; SUBURBAN SCHOOLS

IDENTIFIER: DELAWARE; MEMPHIS; TENNESSEE; WILMINGTON

DESCRIPTIVE NOTE: 8P.

MODULAR OR FLEXIBLE CLASS SCHEDULING IMPLIES THE DIVISION OF EACH SCHOOL DAY INTO 20 MODULES. AT TREZEVANT HIGH SCHOOL IN MEMPHIS, TENNESSEE, UP TO 40 PERCENT OF A STUDENT'S TIME OVER A 5-DAY PERIOD MAY REMAIN UNSCHEDULED. FOR STUDENTS UNABLE TO MANAGE THE FREEDOM OF FLEXIBLE SCHEDULING THERE ARE SUPERVISED STUDY HALLS AND CONTINUOUS COUNSELING. ONE CRITIC OF THE MODULAR SYSTEM CLAIMS THAT IT IS TOO ADMINISTRATIVELY COMPLEX AND TROUBLESOME, AND THAT THE SYSTEM, WHICH REQUIRES THE USE OF COMPUTERS, IS BEING PROMOTED MAINLY BY THE ELECTRONICS INDUSTRY. HOWEVER, PROPONENTS OF MODULAR SCHEDULING CLAIM THAT IT OFFERS CLOSER CONTACT WITH TEACHERS AND GREATER OPPORTUNITIES FOR IN-DEPTH TEACHING, RAISES STUDENT MORALE, AND IS MORE DEMOCRATIC AND NATURAL. EVALUATION OF THIS SYSTEM AT A WILMINGTON, DELAWARE, HIGH SCHOOL REVEALED THAT ALTHOUGH ONLY 3 PERCENT OF THE INTERVIEWED STUDENTS FELT THEY HAD MORE INDIVIDUAL CONTACT WITH TEACHERS, MOST OF THEM REPORTED SIGNIFICANT BENEFITS FROM THE NEW SCHEDULE. IT IS NO T KNOWN, HOWEVER, WHETHER THIS SCHEDULE WILL BE SUCCESSFUL WITH DISADVANTAGED YOUTH. AT PRESENT, THE SYSTEM IS IN USE PRIMARILY IN SUBURBAN SCHOOLS. THE GREAT COST OF THIS COMPUTER-BASED METHOD IS FREQUENTLY PROHIBITIVE. (LB)

JOURNAL CITATION: SOUTHERN EDUCATION REPORT; V3 N3 OCT 1967

ACCESSION NUMBER: ED022241

PUBLICATION DATE: 30 JUN 67

TITLE: A REPORT CONCERNING THE SUMMER WORKSHOP ON MODULAR SCHEDULING; AN ACTIVITY OF THE TITLE III PROJECT: THE USE OF MODULAR SCHEDULING IN CURRICULUM IMPROVEMENT.

DESCRIPTOR: CLASS SIZE; CREDITS; *CURRICULUM DEVELOPMENT; *FLEXIBLE SCHEDULING; GRADING; *GROUPING (INSTRUCTIONAL PURPOSES); INDEPENDENT STUDY; *SCHEDULE MODULES; *SECONDARY SCHOOLS; TEACHING LOAD; TEAM TEACHING

DESCRIPTIVE NOTE: 62P.

PROPOSALS ARE PRESENTED FOR CURRICULUM IMPROVEMENT IN SECONDARY SCHOOLS. THESE PROPOSALS RESULTED FROM A SUMMER WORKSHOP ON MODULAR SCHEDULING FOR SECONDARY SCHOOLS HELD IN SALEM, VIRGINIA, AND CONCERN THE FOLLOWING AREAS: (1) TEAM TEACHING, (2) VARIOUS SIZED INSTRUCTIONAL GROUPS, (3) GROUPING, (4) TEACHER LOAD, (5) CREDITS, (6) MARKING, (7) NONSCHEDULED TIME, (8) SCHOOL PLANT FACILITIES, (9) EVALUATION, AND (10) TIME ALLOTMENTS. TIME ALLOTMENTS ARE CONSIDERED FOR INDIVIDUAL COURSES. (HW)

INSTITUTION NAME: ANDREW LEWIS HIGH SCHOOL, SALEM, VA.

ACCESSION NUMBER: ED022254

PUBLICATION DATE: 68

TITLE: FLEXIBLE SCHEDULING.

PERSONAL AUTHOR: DAVIS, HAROLD S.; BECHARD, JOSEPH E.

DESCRIPTOR: *FLEXIBLE SCHEDULING; INDEPENDENT STUDY; *LARGE GROUP INSTRUCTION; SCHEDULE MODULES; *SMALL GROUP INSTRUCTION; *TEAM TEACHING; *TIME BLOCKS

DESCRIPTIVE NOTE: 31P.

A FLEXIBLE SCHEDULE ALLOWS TEACHERS TO CHANGE GROUP SIZE, GROUP COMPOSITION, AND CLASS LENGTH ACCORDING TO THE PURPOSE OF THE LESSON. THIS PAMPHLET PRESENTS VARIOUS "MASTER" SCHEDULES FOR FLEXIBLE SCHEDULING: (1) SIMPLE BLOCK SCHEDULES, (2) BACK-TO-BACK SCHEDULES, (3) INTERDISCIPLINARY SCHEDULES, (4) SCHOOL-WIDE BLOCK SCHEDULES, (5) OPEN-LAB SCHEDULES, (6) ROTATING SCHEDULES, (7) BLOCK-MODULAR SCHEDULES, AND (8) FLEXIBLE-MODULAR SCHEDULES. DIAGRAMS ACCOMPANY EACH OF THE SCHEDULES. (HW)

AVAILABILITY: EDUCATIONAL RESEARCH COUNCIL OF AMERICA, ROCKEFELLER BLDG., CLEVELAND, OHIO 44133 ($1.00).

INSTITUTION NAME: EDUCATIONAL RESEARCH COUNCIL OF AMERICA, CLEVELAND, OHIO. IN-SERVICE EDUCATION AND STAFF UTILIZATION.

ACCESSION NUMBER: ED026733

PUBLICATION DATE: DEC 68

TITLE: EVALUATION OF THE OUTCOMES OF MODULAR SCHEDULING.

PERSONAL AUTHOR: MAXEY, JAMES

DESCRIPTOR: ACADEMIC ACHIEVEMENT; *EDUCATIONAL IMPROVEMENT; EFFECTIVE TEACHING; *FLEXIBLE SCHEDULING; *HIGH SCHOOLS; INDEPENDENT STUDY; LARGE GROUP INSTRUCTION; *PROGRAM EVALUATION; *SCHEDULE MODULES; SMALL GROUP INSTRUCTION; STUDENT BEHAVIOR; STUDENT OPINION; TEACHER ATTITUDES

DESCRIPTIVE NOTE: 10P.; PAPER PREPARED FOR ANNUAL MEMBERSHIP MEETING OF THE IOWA CENTER FOR RESEARCH IN SCHOOL ADMINISTRATION.

FOUR STUDIES CONDUCTED ON JUNIOR AND SENIOR HIGH SCHOOLS WHICH HAVE USED SOME FORM OF MODULAR SCHEDULING SUGGEST THAT A PROPER WAY TO EVALUATE FLEXIBLE SCHEDULING INCLUDES OBSERVATION OF BEHAVIOR, THE MEASUREMENT OF ATTITUDES AND OPINIONS, AND ASSESSMENT OF PUPIL ACHIEVEMENT. THE STUDIES REPORTED WERE CONDUCTED ON THE FRESNO UNIFIED SCHOOL DISTRICT IN CALIFORNIA, THE LADUE HIGH SCHOOL IN MISSOURI, AND THE DELEVAN-DARIEN HIGH SCHOOL IN DELEVAN, WISCONSIN. THE FOURTH STUDY WAS CONDUCTED ON A HIGH SCHOOL BY GERALD P. SPECKHARD. IT IS CONCLUDED THAT (1) OBSERVABLE BEHAVIOR CAN BE EVALUATED BY RECORDING PATTERNS OF CLASSROOM ACTIVITY; (2) STUDENT, TEACHER, AND PARENTAL VIEWS OF FLEXIBLE SCHEDULING CAN BE ASSESSED VIA OPINIONNAIRES; (3) THE RELATIVE EFFECTIVENESS OF INDEPENDENT STUDY, LARGE GROUP INSTRUCTION, AND SMALL GROUP ACTIVITY CAN BE EVALUATED THROUGH THE USE OF OPINIONNAIRES; AND (4) TEACHING EFFECTIVENESS CAN BE DETERMINED THROUGH COMPARATIVE ACHIEVEMENT TESTING. (HW)

INSTITUTION NAME: IOWA UNIV., IOWA CITY. IOWA CENTER FOR RESEARCH IN SCHOOL ADMINISTRATION.

ACCESSION NUMBER: ED027131

PUBLICATION DATE: 67

TITLE: SCHEDULING.

PERSONAL AUTHOR: ALLAN, BLAINE W.

DESCRIPTOR: CURRICULUM DESIGN; CURRICULUM DEVELOPMENT; *CURRICULUM PLANNING; FLEXIBLE SCHEDULING; *SCHEDULE MODULES; *SCHEDULING; SCHOOL PLANNING; SCHOOL SCHEDULES; *SECONDARY SCHOOLS; *SMALL SCHOOLS; TIME BLOCKS

IDENTIFIER: CLARK COUNTY SCHOOL DISTRICT; *NEVADA; VIRGIN VALLEY HIGH SCHOOL

DESCRIPTIVE NOTE: 18P.

THE MAJOR TOPIC IS THE MODULAR SCHEDULING PROGRAM DEVELOPED FOR VIRGIN VALLEY HIGH SCHOOL IN MESQUITE, NEVADA. THE CONCEPT OF MODULAR UNITS IN CURRICULUM PLANNING IS DESCRIBED WITH VARIOUS MODULAR UNITS ILLUSTRATED GRAPHICALLY. ALSO INCLUDED IS AN EXAMPLE OF A HAND-GENERATED MODULAR SCHEDULE SYSTEM WHICH IS ADAPTABLE IN SCHOOLS WITH A 200- TO 33 WITH A 200- TO 300-STUDENT POPULATION. A BIBLIOGRAPHY OF PUBLICATIONS RELEVANT TO MODULAR SCHEDULING IS APPENDED. THE REPORT IS DISSEMINATED BY TITLE III FUNDS OF THE ELEMENTARY AND SECONDARY EDUCATION ACT. A RELATED DOCUMENT IS RC 003 298. (EV)

INSTITUTION NAME: CLARK COUNTY SCHOOL DISTRICT, LAS VEGAS, NEV.

ACCESSION NUMBER: ED027624

TITLE: FLEXIBLE SCHEDULING: A REALITY.

PERSONAL AUTHOR: ALLEN, DWIGHT W.; DE LAY, DONALD

DESCRIPTOR: *COMPUTER ORIENTED PROGRAMS; COSTS; *CURRICULUM DEVELOPMENT; *FLEXIBLE SCHEDULING; *HIGH SCHOOLS; INDEPENDENT STUDY; SCHEDULE MODULES; *SCHOOL SCHEDULES

IDENTIFIER: *STANFORD SCHOOL SCHEDULING SYSTEM

DESCRIPTIVE NOTE: 10P.

ONE OF THE MAJOR IMPEDIMENTS TO THE ADOPTION OF NEEDED CURRICULAR REFORM IN THE HIGH SCHOOL IS THE RESTRICTIVE, MANUALLY CONSTRUCTED SCHEDULE. TO HELP SOLVE THIS SCHEDULING PROBLEM, THE COMPUTER BASED STANFORD SCHOOL SCHEDULING SYSTEM (SSSS) WAS DEVELOPED. EXPERIENCE WITH THE SSSS DEMONSTRATES ITS FEASIBILITY AND SHOWS THAT ADMINISTRATORS CAN BE FREED FROM THE BURDEN OF SCHEDULING WITHOUT LOSING THE OPPORTUNITY TO MAKE VITAL EDUCATIONAL SCHEDULING DECISIONS. COSTS OF APPROXIMATELY $1 PER STUDENT ARE COMPARABLE TO COSTS OF MANUALLY CONSTRUCTING SCHEDULES. FURTHERMORE, A COMPUTER CAN INVESTIGATE IN A FEW SECONDS THE MILLIONS OF POSSIBLE COMBINATIONS OF TEACHERS, STUDENTS, ROOMS, AND LIMITS OF TIME, THUS MAKING IT POSSIBLE TO SATISFY A HIGH PERCENTAGE OF STUDENT SCHEDULE REQUESTS. COMPUTER SCHEDULING ALSO INCREASES THE RANGE OF PROFESSIONAL DECISIONS POSSIBLE. SINCE FLEXIBLE SCHEDULING IS NECESSARY FOR OBTAINING THE FREEDOM TO EXPERIMENT WITH A WIDE RANGE OF CURRICULUM ALTERNATIVES, RESTRICTIONS IMPOSED BY MANUAL SCHEDULING TECHNIQUES MUST BE REMOVED. THE COMPUTER CAN PROVIDE MAXIMUM FREEDOM TO CHOOSE A SCHEDULE REFLECTING THE ABILITIES AND INTERESTS OF STUDENTS AS WELL AS THE SPECIAL QUALIFICATIONS OF TEACHERS. (TT)

INSTITUTION NAME: STANFORD UNIV., CALIF. SCHOOL OF EDUCATION.

ACCESSION NUMBER: ED027993

PUBLICATION DATE: 66

TITLE: DAILY MODULAR SCHEDULING PRACTICE AT PAHRANAGAT VALLEY HIGH SCHOOL. REPORT.

PERSONAL AUTHOR: ANDERSON, DAVID NEIL

DESCRIPTOR: *CURRICULUM DESIGN; CURRICULUM DEVELOPMENT; *FLEXIBLE SCHEDULING; INDIVIDUALIZED CURRICULUM; LEARNING ACTIVITIES; PROGRAM EVALUATION; *SCHEDULE MODULES; SCHEDULING; SCHOOL SCHEDULES; SECONDARY SCHOOLS; *SMALL SCHOOLS; *TIME FACTORS (LEARNING)

DESCRIPTIVE NOTE: 91P.

THE MAIN TOPIC DISCUSSED IS A DAILY MODULAR SCHEDULING SYSTEM INITIATED FOR THE SMALL ENROLLMENT AT PAHRANAGAT VALLEY HIGH SCHOOL IN ALAMO, NEVADA, WITH SPECIFIC REFERENCE TO TYPES OF INSTRUCTION, SCHEDULE PROCEDURES, AND CONFLICT PROBLEMS. AN EVALUATION OF THE SCHEDULING SYSTEM IS ALSO INCLUDED. THE REPORT IS WRITTEN IN DISSERTATION FORMAT, WHICH PRESENTS A STATEMENT OF THE PROBLEM AND A DEFINITION OF TERMS, A REVIEW OF LITERATURE RELEVANT TO MODULAR SCHEDULING, AND A DISCUSSION OF THE DEVELOPMENT OF A HAND-GENERATED MODULAR SCHEDULE. (EV)

INSTITUTION NAME: NEVADA WESTERN STATES SMALL SCHOOLS PROJECT. CARSON CITY.

ACCESSION NUMBER: ED028501

PUBLICATION DATE: 68

TITLE: THE STANFORD SCHOOL SCHEDULING SYSTEM.

DESCRIPTOR: *COMPUTER ORIENTED PROGRAMS; COURSE ORGANIZATION; DATA PROCESSING; ELECTRONIC EQUIPMENT; *FLEXIBLE SCHEDULING; *INDIVIDUALIZED INSTRUCTION; PROGRAM EVALUATION; PROGRAMING; *SCHOOL SCHEDULES; *SECONDARY EDUCATION

IDENTIFIER: SSSS; *STANFORD SCHOOL SCHEDULING SYSTEM

DESCRIPTIVE NOTE: 28P.

THIS BOOKLET GIVES A GENERAL OVERVIEW OF THE COMPUTERIZED STANFORD SCHOOL SCHEDULING SYSTEM (SSSS) WHICH IS DESIGNED TO MAKE SCHEDULING LESS DIFFICULT FOR INDIVIDUALIZED PROGRAMS IN SECONDARY EDUCATION. TOPICS COVERED INCLUDE NEW FLEXIBLE SCHEDULING AND VARIABLE COURSE STRUCTURE DESIGNS IN SECONDARY EDUCATION, THE SCHOOL SCHEDULING PROBLEM, SCHEDULE CONSTRUCTION USING THE SSSS, FIELD TESTING OF THE SSSS, SSSS PARAMETER LIMITS, AND COMPUTER SYSTEM REQUIREMENTS. AMONG THE ADVANTAGES OF THE SSSS ARE (1) IT IS A TECHNOLOGY WHICH ENABLES THE CONSTRUCTION OF COMPLEX FLEXIBLE SCHEDULES; (2) IT REQUIRES PRECISE DEFINITION OF THE DESIGN OF EACH COURSE OFFERED IN THE SCHOOL PROGRAM, AS WELL AS THE OVERALL PROGRAM DESIGN; AND (3) IT ENCOURAGES PROFESSIONAL PERSONNEL TO EXPLORE IN DETAIL THE APPROPRIATENESS OF DIFFERENT ARRANGEMENTS OF TIME, CLASS SIZE, PUPIL GROUPING, AND USE OF STAFF AND FACILITIES. THE AVAILABILITY OF TECHNICAL DOCUMENTS AND THE SET OF PROGRAMS FOR THE SSSS WRITTEN IN FORTRAN IV FOR IBM SYSTEMS 360-40, 360-50, OR 360-67 IS DESCRIBED IN THE FINAL SECTION. (TT)

INSTITUTION NAME: STANFORD UNIV., CALIF. DEPT. OF INDUSTRIAL ENGINEERING.; STANFORD UNIV., CALIF. SCHOOL OF EDUCATION.

ACCESSION NUMBER: ED028542

PUBLICATION DATE: 68

TITLE: THE BASIC CASE FOR VARIABLE CLASS SCHEDULING.

PERSONAL AUTHOR: WILEY, W. DEANE; BISHOP, LLOYD K.

DESCRIPTOR: CURRICULUM DESIGN; *EDUCATIONAL CHANGE; EDUCATIONAL FACILITIES; *FLEXIBLE SCHEDULING; *HIGH SCHOOLS; *MASTER PLANS; PRINCIPALS; *SCHOOL ORGANIZATION; SECONDARY SCHOOL STUDENTS; SECONDARY SCHOOL TEACHERS; TIME BLOCKS

DESCRIPTIVE NOTE: 27P.; CHAPTER 2 IN THE FLEXIBLY SCHEDULED HIGH SCHOOL.

ALTHOUGH THE MASTER SCHEDULE IS THE FOUNDATION OF THE SECONDARY SCHOOL, VERY FEW ADMINISTRATORS HAVE HAD ANY BACKGROUND IN ITS CONSTRUCTION. SCHEDULING IS A COMPLEX TASK EVEN FOR THE TRADITIONAL EQUAL-TIME-FOR-EACH-SUBJECT SCHEDULING. SCHEDULING SHOULD TAKE INTO ACCOUNT THE METHODOLOGY AND LEARNING PROCESS OF THE SCHOOL. THE PRIME SCHEDULING VARIABLES--TIME, TEACHERS, STUDENTS, FACILITIES, AND CURRICULJM--EACH HAVE PECULIAR SETS OF CIRCUMSTANCES AND LIMITATIONS SURROUNDING THEM AND MUST FIT INTO A COMPLEX BUT COMPLETE PICTURE FOR A PROPER SCHEDULING RATIONALE TO BE DEVELOPED. THE ALLOTMENT OF INSTRUCTIONAL TIME SHOULD VARY ACCORDING TO THE INDIVIDUAL SUBJECT. TEACHERS SHOULD BE GIVEN MORE PREPARATION TIME DURING THE SCHOOL DAY. STUDENTS SHOULD BE GIVEN MORE RESPONSIBILITY FOR THEIR OWN EDUCATION, ESPECIALLY IN THE AREA OF FREE TIME. FACILITIES SHOULD BE MORE FULLY USED BY KEEPING CLASSROOMS IN CONSTANT USE AND BY PROVIDING TEACHERS WITH INDIVIDUAL OFFICES. CURRICULA SHOULD BE MORE DIVERSIFIED TO ACCOMMODATE ALL STUDENTS RATHER THAN JUST COLLEGE PREPARATORY STUDENTS. THESE POSSIBILITIES ARE ALL PRESENT WHEN A VARIABLE CLASS SCHEDULE IS EMPLOYED. IT IS THE PRINCIPAL'S ROLE TO SEE THAT CHANGES ARE MADE. (HW)

AVAILABILITY: PARKER PUBLISHING COMPANY, INC., 1 VILLAGE SQUARE, WEST NYACK, NEW YORK 10994 (COMPLETE DOCUMENT 208 PAGES, $7.95).

ACCESSION NUMBER: ED029507

PUBLICATION DATE: APR 69

TITLE: PROJECT: EDUCATIONAL IMPROVEMENT.

PERSONAL AUTHOR: CHOURY, ELMER C.

DESCRIPTOR: *CHILDREN; DISADVANTAGED YOUTH; *EDUCATIONAL IMPROVEMENT; *EDUCATIONALLY DISADVANTAGED; FLEXIBLE SCHEDULING; *INDIVIDUALIZED INSTRUCTION; LEARNING ACTIVITIES; LOW INCOME GROUPS; MULTIGRADED CLASSES; *MULTIMEDIA INSTRUCTION; MULTISENSORY LEARNING; NONGRADED CLASSES; PROGRAMED INSTRUCTION; SELF CONCEPT; TEACHER AIDES; TEAM TEACHING

IDENTIFIER: COLORADO; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE I; GRAND JUNCTION; LAPS; LEARNING ACTIVITY PACKAGES; MESA COUNTY VALLEY SCHOOL DISTRICT 51

DESCRIPTIVE NOTE: 20P.

THE PROJECT DESCRIBED HERE IS DESIGNED TO MEASURE THE EFFECTIVENESS OF AN INTENSIVE ATTEMPT AT TOTALLY INDIVIDUALIZING INSTRUCTION TO UPGRADE INSTRUCTIONAL PROGRAMS IN TWO ELEMENTARY SCHOOLS WITH THE HIGHEST CONCENTRATION OF DISADVANTAGED STUDENTS IN THE COUNTY. THE GOAL OF THE PROJECT IS TO ACHIEVE A SYSTEM WHICH WILL ALLOW EACH STUDENT TO PROGRESS AT HIS OWN PACE, TEACH HIM GREATER SELF-RELIANCE AND AUTONOMY, PROVIDE HIM WITH A MORE CONDUCIVE ENVIRONMENT FOR ENRICHING EXPERIENCES, AND AID HIM IN DEVELOPING A HEALTHY SELF-CONCEPT. IT IS HOPED THAT THESE AIMS WILL BE ACHIEVED THROUGH MULTI-AGE GROUPING, TEAM TEACHING, FLEXIBLE SCHEDULING, PROGRAMED LEARNING ACTIVITIES, AND NON-GRADING. (GD)

AVAILABILITY: OFFICE OF INSTRUCTIONAL SERVICES, COLORADO DEPARTMENT OF EDUCATION, DENVER, COLO. ($.30)

INSTITUTION NAME: COLORADO STATE DEPT. OF EDUCATION, DENVER. OFFICE OF INSTRUCTIONAL SERVICES.

ACCESSION NUMBER: ED029952

PUBLICATION DATE: 30 SEP 68

TITLE: FLEXIBILITY FOR VOCATIONAL EDUCATION THROUGH COMPUTER SCHEDULING. FINAL REPORT.

PERSONAL AUTHOR: OAKFORD, ROBERT V.; ALLEN, DWIGHT W.

DESCRIPTOR: *COMPREHENSIVE HIGH SCHOOLS; *COMPUTER PROGRAMS; CURRICULUM DEVELOPMENT; DISCIPLINE PROBLEMS; *EXPERIMENTAL PROGRAMS; FLEXIBLE SCHEDULING; PERFORMANCE CRITERIA; PROFILE EVALUATION; PROGRAM DESCRIPTIONS; PROGRAM EFFECTIVENESS; QUESTIONNAIRES; RECORDS (FORMS); RELEASED TIME; *SCHEDULE MODULES; SCHEDULING; STAFF UTILIZATION; STATISTICAL DATA; STUDENT ATTITUDES; STUDENT TEACHER RELATIONSHIP; TEACHER ATTITUDES; TEACHING METHODS; *VOCATIONAL HIGH SCHOOLS

IDENTIFIER: SSSS; *STANFORD SCHOOL SCHEDULING SYSTEM

DESCRIPTIVE NOTE: 430P.

IN 1965, A 3-YEAR DEVELOPMENTAL PROGRAM WAS BEGUN TO DETERMINE THE DESIRABILITY OF MODULAR SCHEDULING FOR COMPREHENSIVE AND VOCATIONAL SCHOOLS AND TO INVESTIGATE THE IMPACT OF SUCH SCHEDULING ON 18 SECONDARY SCHOOLS. DURING THIS TIME MORE THAN 15,000,000 DATA WERE PROVIDED BY THE SCHOOLS. THE STANFORD SCHOOL SCHEDULING SYSTEM, A COMPUTER PROGRAM FOR SCHEDULE CONSTRUCTION BASED ON COURSE DESIGN AND STUDENT COURSE SELECTION, WAS DEVELOPED. OVER 250 MODULAR SCHEDULES HAVE BEEN PRODUCED BY THIS PROGRAM. SOME OF THE FINDINGS WERE: (1) COURSES WERE SUBSTANTIALLY MODIFIED AS A RESULT OF ALTERNATIVES PROVIDED BY MODULAR SCHEDULING, (2) THE USE OF TEAM TEACHING AND LARGE AND SMALL GROUP INSTRUCTION INCREASED, (3) THE USE OF STUDENT PERFORMANCE CRITERIA AS THE BASIS FOR ADVANCEMENT INCREASED, (4) SPACE UTILIZATION WAS DIFFERENT BUT MORE SPACE WAS NOT REQUIRED, (5) DISCIPLINARY PROBLEMS INCREASED AND LATER SUBSIDED WHILE ATTENDANCE PROBLEMS INCREASED, (6) THERE WAS INCREASED INTERACTION BETWEEN STUDENTS AND SCHOOL PERSONNEL IN ALL SCHOOLS EXCEPT ONE, (7) STAFF UTILIZATION PATTERNS CHANGED TO INCREASED RESPONSIBILITIES BUT INVOLVED LESS AFTER HOURS WORK, AND (8) MOST STUDENTS AND TEACHERS WOULD PREFER NOT TO RETURN TO TRADITIONAL SCHEDULING. DESCRIPTIVE INFORMATION FOR THE SCHOOLS, DATA TABLES, AND DATA COLLECTION FORMS ARE INCLUDED. (EM)

INSTITUTION NAME: STANFORD UNIV., CALIF.

ACCESSION NUMBER: ED030206

PUBLICATION DATE: 68

TITLE: A COMPUTER-GENERATED, TEACHER-DEVELOPED, MODULAR-FLEXIBLE SCHEDULE.

PERSONAL AUTHOR: PETREQUIN, GAYNOR; TAPFER, WILLIAM G.

DESCRIPTOR: *COMPUTER ORIENTED PROGRAMS; *FLEXIBLE SCHEDULING; *HIGH SCHOOLS; INDEPENDENT STUDY; *INDIVIDUALIZED INSTRUCTION; INSERVICE TEACHER EDUCATION; LARGE GROUP INSTRUCTION; PROGRAM DEVELOPMENT; *SCHEDULE MODULES; SCHOOL SCHEDULES; SMALL GROUP INSTRUCTION; TEAM TEACHING

IDENTIFIER: MARSHALL HIGH SCHOOL; OREGON; PORTLAND; STANFORD SCHOOL SCHEDULING SYSTEM

DESCRIPTIVE NOTE: 24P.; CHAPER 1 IN INDIVIDUALIZED LEARINING THROUGH MODULAR FLEXIBLE PROGRAMMING, BY GAYNOR PETREQUIN.

THE BLENDING OF TECHNOLOGY WITH TEACHING HAS PERMITTED THE INTRODUCTION OF INDIVIDUALIZED INSTRUCTION FOR THE TOTAL STUDENT BODY AT MARSHALL HIGH SCHOOL, PORTLAND, OREGON. IN CONJUNCTION WITH THE SCHOOL OF EDUCATION AT STANFORD UNIVERSITY, A COMPUTERIZED MODULAR-FLEXIBLE SCHEDULE WAS MADE OPERATIONAL AND PUT TO USE IN SEPTEMBER 1963. PRIOR TO IMPLEMENTATION, EXPERIMENTAL TEACHING TECHNIQUES SUCH AS TEAM TEACHING WERE UNDERTAKEN, AND INSERVICE TRAINING WORKSHOPS FOR MARSHALL STAFF MEMBERS WERE USED TO PREPARE FOR THE NEW INSTRUCTIONAL PROGRAM. WHEN THE PROGRAM WAS IMPLEMENTED, THE BASIC SCHEDULE WAS CHANGED FROM THE CONVENTIONAL SEVEN-PERIOD DAY TO ONE DIVIDED INTO 21 20-MINUTE MODULES. STUDENTS, WITH ADVISORY HELP, PREREGISTER IN THE SPRING FOR THE FOLLOWING YEAR. WITH THESE STUDENT SCHEDULES, A MASTER PLAN IS PREPARED WITH THE USE OF A COMPUTER. FLEXIBILITY IS PERMITTED BY USE OF FOUR TEACHING-LEARNING MODES--LARGE GROUP INSTRUCTION, MEDIUM-SIZE GROUPS FOR LABORATORY ACTIVITIES, SMALL GROUP LEARNING EXPERIENCES, AND INDEPENDENT STUDY. (LN)

AVAILABILITY: MCGRAW HILL PUBLISHING COMPANY, 330 WEST 42ND ST., NEW YORK, N.Y. 10036 (COMPLETE DOCUMENT 180 PAGES, $5.95, $3.95 PAPER).

ACCESSION NUMBER: ED030353

PUBLICATION DATE: 69

TITLE: MODULAR SCHEDULING AND MODERN FOREIGN LANGUAGES.

PERSONAL AUTHOR: HIBBARD, ALLEN

DESCRIPTOR: CLASS ACTIVITIES; DECISION MAKING; *EDUCATIONAL PRACTICE; FLEXIBLE SCHEDULING; INDIVIDUALIZED INSTRUCTION; INSTRUCTIONAL AIDS; LANGUAGE INSTRUCTION; LANGUAGE LABORATORY USE; *LANGUAGE PROGRAMS; *PROGRAM DESCRIPTIONS; PROGRAM DESIGN; *SCHEDULE MODULES; *SECONDARY SCHOOLS; STUDENT TEACHER RELATIONSHIP; TEACHING LOAD; TEACHING METHODS

IDENTIFIER: *MINNESOTA; WHITE BEAR LAKE

DESCRIPTIVE NOTE: 3P.; ADDRESS GIVEN BEFORE THE SPRING CONFERENCE OF THE FOREIGN LANGUAGE ASSOCIATION, DICKINSON, NORTH DAKOTA, APRIL 19, 1969

A DESCRIPTION OF THE MODULAR SCHEDULING PRACTICES IN THE FOREIGN LANGUAGE PROGRAMS OF THE WHITE BEAR LAKE, MINNESOTA SECONDARY SCHOOLS INCLUDES INFORMATION ON ITS GENERAL DESIGN, ADVANTAGES, AND PROBLEMS. FOLLOWING DISCUSSIONS OF ARRANGEMENTS FOR SCHEDULING, STUDENT-TEACHER CONTACT TIME, CLASSROOM ACTIVITIES, MORE INDIVIDUALIZED INSTRUCTION, SCHEDULED AND UNSCHEDULED LABORATORY TIME, AND INSTRUCTIONAL AIDS, THERE ARE BRIEF GUIDELINES TO BE FOLLOWED IN DECIDING ON A SCHEDULE. (AF)

JOURNAL CITATION: FOREIGN LANGUAGE ASSOCIATION OF NORTH DAKOTA (FLAND) NEWS; V1 N1 P4-6 SPRING 1969

ACCESSION NUMBER: ED031066

PUBLICATION DATE: DEC 64

TITLE: SCHOOL SCHEDULING BY COMPUTER, THE STORY OF GASP.

PERSONAL AUTHOR: MURPHY, JUDITH; SUTTER, ROBERT

DESCRIPTOR: *COMPUTER PROGRAMS; *DATA PROCESSING; *FLEXIBLE SCHEDULES; *PROGRAMERS; *SCHOOL SCHEDULES

DESCRIPTIVE NOTE: 64P.

GENERALIZED ACADEMIC SIMULATION PROGRAMS (GASP) IS SCHOOL SCHEDULING BY COMPUTER. THE PUBLICATION COMPARES THE MANUAL METHOD OF DEVELOPING A SCHOOL SCHEDULE WITH THE NEW METHOD OF COMPUTER PROGRAMING. A MAJOR ADVANTAGE OF COMPUTER PROGRAMING IS THAT IT RELIEVES THE ADMINISTRATOR OF THIS BUSY WORK SO THAT HE CAN DEVOTE HIS ENERGIES AND TIME TO MORE IMPORTANT EDUCATIONAL PROBLEMS. TO CONVERT TO COMPUTER SCHEDULING, A SCHOOL PRINCIPAL WILL HAVE TO BECOME ACQUAINTED WITH COMPUTER LANGUAGE OR EMPLOY A PROGRAMER IN A DATA PROCESS CENTER. A MAJOR ADVANTAGE TO COMPUTER PROGRAMING IS THAT IT CAN FACILITATE FLEXIBLE SCHEDULING OF PUPILS, HERETOFORE STYMIED BY HUMAN SHORTCOMING AND INADEQUACY. COMPUTER SCHEDULING ALLOWS CONSIDERABLE LEEWAY IN SETTING THE PARAMETERS FOR THE SCHEDULING OF SUBJECTS. GASP SHOULD NOT BE VIEWED AS LIMITED CYBERNETICALLY TO THE SCHEDULING OF PUPILS. ONCE AN ADMINISTRATOR UNDERSTANDS ITS LANGUAGE AND ITS POTENTIAL, THE COMPUTER CAN BE USED TO ANSWER "WHAT IF" QUESTIONS AND "EDUCATIONAL ASSUMPTIONS" WHICH WITHOUT THE COMPUTER THE ADMINISTRATOR COULD ONLY IMAGINE BUT NEVER IMPLEMENT FOR LACK OF COMPUTER PROGRAMING AND THE KNOWLEDGE OF OUTCOMES. THIS DOCUMENT PREVIOUSLY ANNOUNCED AS ED 018 092. (JZ)

INSTITUTION NAME: EDUCATIONAL FACILITIES LABS., INC., NEW YORK, N.Y.

ACCESSION NUMBER: ED034309

PUBLICATION DATE: 68

TITLE: SCHEDULING MUSIC CLASSES.

PERSONAL AUTHOR: KLOTMAN, ROBERT H., ED.

DESCRIPTOR: *COMPUTERS; *CURRICULUM; ELECTRONIC DATA PROCESSING; ELEMENTARY SCHOOLS; *FLEXIBLE SCHEDULING; INDIVIDUAL STUDY; KINDERGARTEN; *MUSIC EDUCATION; PROGRAM PLANNING; RESOURCE ALLOCATIONS; SCHEDULE MODULES; *SCHEDULING; SCHOOL SIZE; SECONDARY SCHOOLS; TEACHER ROLE; TEAM TEACHING

DESCRIPTIVE NOTE: 70P.

THIS COLLECTION OF ARTICLES ON CLASS SCHEDULING PROBLEMS EMPHASIZES SCHEDULING OF MUSIC CLASSES. THE FIRST PART OF THE BOOKLET CONTAINS DESCRIPTIONS OF 11 CURRENT SCHEDULING PRACTICES. THE SECOND PART IS CONCERNED WITH DATA PROCESSING AND THE USE OF COMPUTERS FOR SCHEDULING, WITH DISCUSSION CENTERING ON THE STANFORD SCHOOL SCHEDULING SYSTEM. THE LAST PART OF THE BOOKLET CONSIDERS FLEXIBLE SCHEDULING, EMPHASIZING A SPECIFIC PLAN AS USED IN THE BROOKHURST JUNIOR HIGH SCHOOL IN ANAHEIM, CALIFORNIA. (DE)

AVAILABILITY: NATIONAL EDUCATION ASSOCIATION, 1201 SIXTEENTH ST., N.W., WASHINGTON, D.C. 20036 ($1.50)

INSTITUTION NAME: MUSIC EDUCATORS NATIONAL CONFERENCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED035254

PUBLICATION DATE: 68

TITLE: INDEPENDENT SCHOOL DISTRICT #834, STILLWATER SENIOR HIGH SCHOOL, STILLWATER, MINNESOTA.

DESCRIPTOR: BUILDING PLANS; *EDUCATIONAL PROGRAMS; FLEXIBLE SCHEDULING; GROUP DISCUSSION; *HIGH SCHOOLS; INDIVIDUAL STUDY; LEARNING LABORATORIES; *PHYSICAL ENVIRONMENT; RESOURCE CENTERS; *SCHOOL DESIGN; SITE DEVELOPMENT; TEAM TEACHING

DESCRIPTIVE NOTE: 13P.

IN 1962 A RE-EVALUATION OF THIS HIGH SCHOOL'S EDUCATIONAL PROGRAM INDICATED A NEED FOR MASSIVE CHANGE IN ITS ORGANIZATION PATTERNS; EMPHASIS WAS TO BE ON THE INDIVIDUAL STUDENT AND HIS ADAPTABILITY IN A CHANGING SOCIETY. THE NEW PATTERN OF ORGANIZATION INCLUDES LARGE AND SMALL GROUP DISCUSSIONS, TEACHER TEAMS, RESOURCE CENTERS OR LEARNING LABORATORIES, INDIVIDUAL LEARNING, AND FLEXIBLE SCHEDULING. A SITE PLAN, FLOOR PLANS, AND PHOTOGRAPHS EXPLAIN THE PHYSICAL ENVIRONMENT OF THE SCHOOL. (TC)

INSTITUTION NAME: HAMMEL, GREEN AND ABRAHAMSON, ARCHITECTS, ST. PAUL, MINN.

ACCESSION NUMBER: ED036376

PUBLICATION DATE: JUL 59

TITLE: GUIDEBOOK ON FLEXIBLE SCHEDULING. A REPORT OF THE STUDY GROUP ON FLEXIBLE SCHEDULING.

DESCRIPTOR: CLASS SIZE; COURSE ORGANIZATION; CURRICULUM EVALUATION; DATA PROCESSING; *FLEXIBLE SCHEDULING; GUIDES; *MASTER PLANS; PLANNING; QUESTIONNAIRES; *RESEARCH METHODOLOGY; *SECONDARY GRADES; *SMALL SCHOOLS; STUDENT ATTITUDES; TEACHER ATTITUDES; TIME BLOCKS

DESCRIPTIVE NOTE: 135P.

A TOOL FOR STAFF INVOLVED IN SCHEDULING FOR THE SMALL HIGH SCHOOL, THIS GUIDE TAKES A LOOK AT PRIORITIES, SCHEDULE DESIGN AND IMPLEMENTATION, BUILDING THE MASTER SCHEDULE, AND RESEARCH APPROACHES FOR BETTER SCHEDULING. SPECIFIC TEACHER AND STUDENT RESPONSES TO VARIOUS SCHEDULES ARE TABULATED. METHODS OF DATA ANALYSIS ARE PRESENTED WITH SAMPLES OF CLASS AND SUBJECT SCHEDULES. STAFF AND STUDENT QUESTIONNAIRES ARE REPRODUCED IN FULL. NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT. (BD)

INSTITUTION NAME: CATSKILL AREA PROJECT IN SMALL SCHOOL DESIGN, ONEONTA, N.Y.

ACCESSION NUMBER: ED037809

PUBLICATION DATE: JUL 69

TITLE: FLEXIBLE-MODULAR SCHEDULING AND RELATED INSTRUCTIONAL STRATEGIES.

PERSONAL AUTHOR: VALENCIA, ATILANO A.

DESCRIPTOR: EDUCATIONAL RESOURCES; *EDUCATIONAL STRATEGIES; *FLEXIBLE SCHEDULING; *GROUPING (INSTRUCTIONAL PURPOSES); *HIGH SCHOOL CURRICULUM; INDEPENDENT STUDY; INDIVIDUALIZED INSTRUCTION; LARGE GROUP INSTRUCTION; MODELS; SCHEDULE MODULES; SCHEDULING; SMALL GROUP INSTRUCTION

DESCRIPTIVE NOTE: 29P.

THIS REPORT PROVIDES A SIMPLIFIED DESCRIPTION OF FLEXIBLE-MODULAR SCHEDULING AND OF SEVERAL TYPES OF INSTRUCTIONAL STRATEGIES THAT CAN BE ADVANTAGEOUSLY APPLIED TO HIGH SCHOOL CURRICULA. GROUP SIZE, FACILITIES, AND TEACHING ROLES ARE CONSIDERED IN THE OVERALL PICTURE OF FLEXIBLE-MODULAR SCHEDULING. LARGE GROUP INSTRUCTION CAN CONSERVE SPACE, TEACHERS, AND REPETITIOUS PRESENTATIONS OF IMPORTANT CONCEPTS. THE ROLE OF THE TEACHER IN THIS TEACHING MODE IS DIRECTIVE. IN SMALL GROUP INSTRUCTION WHERE DISCUSSION AND TASK ORIENTATIONS PREVAIL, A TEACHER BECOMES MORE PARTICIPATORY THAN DIRECTIVE. LABORATORY INSTRUCTION ALLOWS FURTHER INDIVIDUALIZATION BECAUSE THE STUDENT IS PERMITTED TO WORK INDEPENDENTLY. TIME CONFIGURATIONS CAN BE PLANNED TO CORRESPOND TO THE INSTRUCTIONAL MODES USED IN ATTAINING THE COURSE OBJECTIVES. COMPLEXITY IN THE SCHEDULING PROCESS OCCURS WHEN MANY TIME PATTERNS ARE USED, BUT THIS CAN BE ALLEVIATED WITH LESS STRUCTURED TIME IN THE CURRICULUM. FLEXIBLE-MODULAR SCHEDULING IS RECOMMENDED TO CONTINUOUSLY IMPROVE CURRICULUM AND INSTRUCTION AND TO OPTIMIZE LEARNING OPPORTUNITIES FOR STUDENTS IN THE TOTAL EDUCATIONAL SYSTEM. (LN)

INSTITUTION NAME: SOUTHWESTERN COOPERATIVE EDUCATIONAL LAB., ALBUQUERQUE, N. MEX.

ACCESSION NUMBER: ED038416

PUBLICATION DATE: 69

TITLE: A MODULAR SCHEDULE (TELSTAR REGIONAL HIGH SCHOOL'S HUMANITIES-ORIENTED ENGLISH PROGRAM).

PERSONAL AUTHOR: RUSSELL, FRANCES M., ED.

DESCRIPTOR: ENGLISH INSTRUCTION; *ENGLISH PROGRAMS; FLEXIBLE SCHEDULES; *HIGH SCHOOL CURRICULUM; HUMANITIES; *HUMANITIES INSTRUCTION; *SCHEDULE MODULES; SECONDARY EDUCATION

DESCRIPTIVE NOTE: 13P.; IN "CURRICULUM BULLETIN," FALL 1969, VOL. 2, NO. 1, PP. 38-50

TO BETTER MATCH AVAILABLE TIME AND FACILITIES TO THE FORM AND CONTENT OF SUBJECT MATTER, A HUMANITIES-ORIENTED ENGLISH PROGRAM WAS COORDINATED WITH PROGRAMS IN OTHER CONTENT AREAS AND A MODULAR SCHEDULE WILL BE SET UP. EACH CLASS DAY WILL CONSIST OF 24 FIFTEEN-MINUTE MODULES, AND SOME MEETING TIMES WILL BE A MULTIPLE OF THESE 15-MINUTE PERIODS. TO ALLOW THE STUDENT TO ELECT MORE THAN THE USUAL NUMBER OF SUBJECTS AND TO PROVIDE EXTRA TIME FOR RELAXATION AND INDEPENDENT STUDY, CLASSES MAY MEET TWO, THREE, OR FOUR TIMES A WEEK. FOR GRADUATION, STUDENTS MUST PASS A MINIMUM OF 24 CLASSES, INCLUDING FOUR FROM ONE OF THREE ENGLISH PROGRAMS--INDIVIDUALIZED, THEMATIC, OR TRADITIONAL. (APPENDICES INCLUDE A SAMPLE STUDENT SCHEDULE, A LIST OF MAJOR AND MINOR ELECTIVES, DESCRIPTIONS OF COURSES AVAILABLE IN EACH OF THE ENGLISH PROGRAMS, AND A BOOK SELECTION LIST.) (JM)

INSTITUTION NAME: MAINE STATE DEPT. OF EDUCATION, AUGUSTA.

ACCESSION NUMBER: ED040802

PUBLICATION DATE: 31 MAR 70

TITLE: ADMINISTRATORS' CONFERENCE ON SCHEDULING.

DESCRIPTOR: *CONFERENCE REPORTS; FLEXIBLE SCHEDULING; *INNOVATION; *PLANNING; RELEASED TIME; SCHOOL PLANNING; *SCHOOL SCHEDULES; *SMALL SCHOOLS; TIME BLOCKS; YEAR ROUND SCHOOLS

DESCRIPTIVE NOTE: 49P.; PROCEEDINGS OF ADMINISTRATORS' CONFERENCE (MARION HOTEL, SALEM, OREGON, MARCH 30 AND 31, 1970)

PROCEEDINGS OF THE ADMINISTRATORS' CONFERENCE ON SCHEDULING, SPONSORED BY THE OREGON SMALL SCHOOLS PROGRAM AND CONDUCTED IN MARCH OF 1970, COMPRISE THIS DOCUMENT. PURPOSE OF THE CONFERENCE WAS TO EXAMINE METHODS, TECHNIQUES, AND PHILOSOPHIES RELATING TO POSSIBLE BENEFITS OF RESTRUCTURING OREGON'S SMALL SCHOOL ENVIRONMENTS. PRESENTATIONS INCLUDE: A GENERAL OVERVIEW OF SCHEDULING IN THE SMALL SCHOOL, AN EXAMPLE OF BLOCK SCHEDULING, FLEXIBLE BLOCK SCHEDULING, A WEEKLY DEMAND SCHEDULE, FUNCTIONAL SCHEDULING, HAND-GENERATED MODULAR SCHEDULING, A PROPOSED 12-MONTH 4-DAYS-A-WEEK SCHEDULING MODEL, AND A CONFERENCE SUMMARY AND CHALLENGE. SPECIFIC REFERENCES ARE MADE TO THE IMPORTANCE OF THE SCHOOL SCHEDULE AND TO THE NEED FOR ADEQUATE PLANNING AND INSERVICE TRAINING OF TEACHERS IF CHANGES IN THE SCHOOL SCHEDULING METHOD ARE TO BE IMPLEMENTED. ELEVEN ILLUSTRATIONS, A LIST OF CONFERENCE PARTICIPANTS, AND AN EVALUATION REPORT ARE INCLUDED. (AL)

INSTITUTION NAME: OREGON STATE BOARD OF EDUCATION, SALEM.

ACCESSION NUMBER: ED043269

PUBLICATION DATE: 70

TITLE: NEW SCHEDULING PATTERNS AND THE FOREIGN LANGUAGE TEACHER. ERIC FOCUS REPORTS ON THE TEACHING OF FOREIGN LANGUAGES, NUMBER 18.

PERSONAL AUTHOR: ARENDT, JERMAINE D.

DESCRIPTOR: CHARTS; CONTINUOUS PROGRESS PLAN; CURRICULUM DEVELOPMENT; FLEXIBLE SCHEDULES; *FLEXIBLE SCHEDULING; GROUPING (INSTRUCTIONAL PURPOSES); INDIVIDUAL DEVELOPMENT; *INDIVIDUALIZED INSTRUCTION; *LANGUAGE INSTRUCTION; LEARNING PROCESSES; LEARNING THEORIES; *MODERN LANGUAGES; SCHEDULE MODULES; *SECONDARY EDUCATION; TIME BLOCKS; UNGRADED CLASSES

DESCRIPTIVE NOTE: 18P.

A REVIEW OF TRADITIONAL SCHEDULING PATTERNS AND PROBLEMS WHICH ARISE FROM INFLEXIBLE, LOCKSTEP SYSTEMS LEADS TO AN EXAMINATION OF THE SEVEN-PERIOD DAY. CHARTS ILLUSTRATE THE CONCEPT OF THE "FLOATING" PERIOD. THE AUTHOR THEN DISCUSSES: (1) FLEXIBLE MODULAR SCHEDULING; (2) LARGE, INTERMEDIATE, AND SMALL GROUP INSTRUCTION; AND (3) INDIVIDUAL AND INDEPENDENT STUDY. SPECIFIC REFERENCE IS MADE TO PROGRAMS MAKING USE OF LEARNING PACKAGES, E.G. MINIPACS, UNIPACS, AND LEARNING ACTIVITY PACS. A DEPARTURE FROM OTHER KINDS OF FLEXIBLE SCHEDULING, CALLED "DEMAND" SCHEDULING, IS REVIEWED. PROBLEMS AND ADVANTAGES OF FLEXIBLE SCHEDULING ARE ENUMERATED. CONCLUDING REMARKS FOCUS ON STUDENT ACHIEVEMENT, SPECIAL NEEDS, THE TEACHER, AND THE QUARTER OR SEMESTER PLAN. AN APPENDIX PRESENTS RECOMMENDATIONS AND SUGGESTIONS OF THE CONFERENCE ON FLEXIBLE SCHEDULING AND FOREIGN LANGUAGE TEACHING. (RL)

AVAILABILITY: MLA/ACTFL MATERIALS CENTER, 62 FIFTH AVE., NEW YORK, N.Y. 10011 ($.25)

INSTITUTION NAME: AMERICAN COUNCIL ON THE TEACHING OF FOREIGN LANGUAGES, NEW YORK, N.Y.; MODERN LANGUAGE ASSOCIATION OF AMERICA, NEW YORK, N.Y. ERIC CLEARINGHOUSE ON THE TEACHING OF FOREIGN LANGUAGES.

SUBJECT INDEX

ADMINISTRATOR ROLE

ED 021 657

CLASS ORGANIZATION

ED 012 683

CLASSROOM DESIGN

ED 018 999

COMPREHENSIVE HIGH SCHOOLS

ED 029 952

COMPUTER ORIENTED PROGRAMS

ED 018 960
021 657
021 669
027 624
028 501
029 952
030 206
031 066
034 309

CONFERENCE REPORTS

ED 040 802

CURRICULUM DEVELOPMENT

ED 011 752
022 241
027 131
027 624
027 993
034 309

DATA PROCESSING

ED 021 662
031 066

EDUCATIONAL IMPROVEMENT

ED 026 733
028 542
029 507
035 254
040 802

EDUCATIONAL STRATEGIES

ED 037 809

EDUCATIONALLY DISADVANTAGED

ED 029 507

ENGLISH INSTRUCTION

ED 018 414
038 416

EXPERIMENTAL PROGRAMS

ED 029 952

GROUPING (INSTRUCTIONAL PURPOSES)

ED 012 683
022 241
037 809

HIGH SCHOOL CURRICULUM

ED 037 809
038 416

HIGH SCHOOLS

ED 018 999
026 733
027 624
028 542
030 206
035 254

HUMANITIES INSTRUCTION

ED 038 416

ILLUSTRATIONS

ED 021 662

INDEPENDENT STUDY

ED 018 414
018 960
021 669

INDIVIDUALIZED INSTRUCTION

ED 012 392
018 414
028 501
029 507
030 206
043 269

INSTRUCTIONAL AIDS

ED 010 972

JUNIOR HIGH SCHOOLS

ED 011 752

LANGUAGE INSTRUCTION

ED 011 752
012 392
030 353
043 269

LARGE GROUP INSTRUCTION

ED 022 254

MASTER PLANS

ED 028 542
036 376

MODERN LANGUAGES

ED 043 269

MULTIMEDIA INSTRUCTION

ED 029 507

MULTIPURPOSE CLASSROOMS

ED 018 999

MUSIC EDUCATION

ED 034 309

PHYSICAL ENVIRONMENT

ED 035 254

PLANNING

ED 040 802

PROGRAM EFFECTIVENESS

ED 021 905

PROGRAM EVALUATION

ED 026 733

READING INSTRUCTION

ED 012 683

RESEARCH METHODOLOGY

ED 036 376

SCHEDULE MODULES

ED 011 752
021 657
021 662
021 905
022 241
026 733
027 131
027 993
029 952
030 206
030 353
038 416

SCHOOL DESIGN

ED 018 999
035 254

SCHOOL ORGANIZATION

ED 028 542

SECONDARY SCHOOLS

ED 022 241
027 131
028 501
030 353
036 376
043 269

SMALL GROUP INSTRUCTION

ED 022 254

SMALL SCHOOLS

ED 010 792
021 657
021 662
021 669
027 131
027 993
036 376
040 802

STUDENT REACTION

ED 021 669

STUDENT RESEARCH

ED 018 414

TEAM TEACHING

ED 022 254

TIME BLOCKS

ED 022 254

TIME FACTORS (LEARNING)

ED 027 993

VOCATIONAL HIGH SCHOOLS

ED 029 952

GPO 780-195

ERIC DOCUMENT REPRODUCTION SERVICE
LEASCO INFORMATION PRODUCTS, INC.

P.O. Drawer O, Bethesda, Md. 20014

ERIC REPORTS

ON-DEMAND ORDER BLANK

BILL TO: _____

SHIP TO: _____

PURCHASE ORDER NO. _____

REPORTS TO BE ORDERED

ITEM	ED Number	Number of Copies MF	Number of Copies HC	PRICE (see reverse)	TOTAL PRICE
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
				SUB-TOTAL	
				TAX	
				TOTAL	

☐ TAX NUMBER _____

☐ DEPOSIT ACCT. NUMBER _____

☐ CHARGE (OVER $10.00) _____

☐ CHECK NUMBER _____

HOW TO ORDER

To order ERIC REPORTS include complete information for all order form items. Please print or type all information clearly.

1. Complete "bill to" and "ship to" addresses. Be sure to complete "ship to" address if different from "bill to". A like "ship to" address may be completed as "SAME". Include zip code.

2. Order by printing ED number in designated space. ED accession numbers are listed in Research in Education (RIE). RIE may be purchased from: Superintendent of Documents, GPO, Washington, D.C. 20402.

3. Include number of copies (1, 2, 3, etc.) to be ordered in appropriate space. Use MF space for microfiche copies, use HC space for hard copy (paper). *Check RIE for availability of document in MF and HC.*

4. Include price from the rate schedule. (Refer to price schedule on back.) Prices are also published in current issues of RIE.

5. Some ED numbers represent a series of titles, and will be billed by title, not ED number. A list of applicable ED numbers is available.

6. Extend number of copies and price for total price for each entry.

7. Add items 1 through 15 and insert amount in "Sub-Total" box.

8. Add state sales tax for Illinois and Maryland or check box and cite tax exemption number for Illinois and Maryland only.

9. Add "Sub-Total" and "Tax" and insert amount in "Total" box.

10. Indicate payment method desired. Payment must accompany all orders of $10.00 or less. Make all drafts payable to EDRS.

11. Sign AUTHORIZATION and date order.

12. Include only 15 entries per form. Complete and sign additional forms if required.

13. Quality warranty. LIPCO will replace products returned because of reproduction defects or incompleteness. The quality of the input document is not the responsibility of LIPCO. Best available copy will be supplied.

ERIC DOCUMENT REPRODUCTION SERVICE is operated by Leasco Information Products, Inc. for the U.S. Office of Education.

Orders are filled only from ED accession numbers. Titles are not checked. *Please be sure you have supplied the correct numbers.*

AUTHORIZATION _____ DATE _____

TITLE OR DEPT. _____

**SUBJECT TO ALL TERMS AND CONDITIONS ON REVERSE SIDE OF THIS FORM.*

MAKE ALL DRAFTS PAYABLE TO EDRS

PRICE LIST

Microfiche Copy – Each Title		.65
Hard Copy – Each Title by number of pages:		
Pages:	1 - 100	3.29
	101 - 200	6.58
	201 - 300	9.87
	301 - 400	13.16
	401 - 500	16.45
Each Additional 100 pages or portion thereof.		3.29

1. Book Rate or Library Rate postage is included in above prices.
2. The difference between Book Rate or Library Rate and first class or foreign postage (outside the continental United States) rate will be billed at cost.

TERMS AND CONDITIONS

1. PRICE LIST

The prices set forth above may be changed without notice; however, any price change will be subject to the approval of the U.S. Office of Education Contracting Officer.

2. PAYMENT

The prices set forth above do not include any sales, use, excise, or similar taxes which may apply to the sale of microfiche or nard copy to the Customer. The cost of such taxes, if any, shall be borne by the Customer.

Payment shall be made net thirty (30) days from date of invoice. Payment shall be without expense to LIPCO.

3. REPRODUCTION

Materials supplied hereunder may only be reproduced by not-for-profit educational institutions and organizations; provided however, that express permission to reproduce a copyrighted document provided hereunder must be obtained in writing from the copyright holder noted on the title page of such copyrighted document.

4. CONTINGENCIES

LIPCO shall not be liable to Customer or any other person for any failure or delay in the performance of any obligation if such failure of delay, (a) is due to events beyond the control of LIPCO including, but not limited to, fire, storm, flood, earthquake, explosion, accident, acts of the public enemy, strikes, lockouts, labor disputes, labor shortage, work stoppages, transportation embargoes or delays, failure or shortage of materials, supplies or machinery, acts of God, or acts or regulations or priorities of the federal, state, or local governments, (b) is due to failures of performance of subcontractors beyond LIPCO's control and without negligence on the part of LIPCO, or (c) is due to erroneous or incomplete information furnished by Customer.

5. LIABILITY

LIPCO's liability, if any, arising hereunder shall not exceed restitution of charges.

In no event shall LIPCO be liable for special, consequential, or liquidated damages arising from the provision of services hereunder.

6. WARRANTY

LIPCO MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO ANY MATTER WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

7. CHANGES

No waiver, alteration, or modification of any of the provisions hereof shall be binding unless in writing and signed by an officer of LIPCO.

8. DEFAULT AND WAIVER

a. If Customer fails with respect to this or any other agreement with LIPCO to pay any invoice when due or to accept any shipment as ordered, LIPCO may without prejudice to other remedies defer any further shipments until the default is corrected, or cancel this Purchase Order.

b. No course of conduct nor any delay of LIPCO in exercising any right hereunder shall waive any rights of LIPCO or modify this Agreement.

9. GOVERNING LAW

This Agreement shall be construed to be between merchants. Any question concerning its validity, construction, or performance shall be governed by the laws of the State of New York.

Clearinghouse on Rural Education and Small Schools

New Mexico State University

Box 3 AP

Las Cruces, New Mexico 88001

A Unit of the Educational Resources Information Center of the National Center for Educational Communication, USOE

ERIC CRESS